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ABSTRACT

This report presents detailed procedures and findings of research on Japanese high school seniors, their choice of courses, educational and career expectations and preferences, and the extent to which these attitudes conform to relationships in Japanese labor markets. The appendixes contained in this final volume of the five-unit report include questionnaires and supplementary material regarding family background, course preferences, and school and work aspirations. The entire five volumes of the report are available as VT 013 653-013 657. (BH)

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Final Report

Project Grant No. OE-G-3-6-000537-0744

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A THEORETICAL AND EMPIRICAL ANALYSIS OF VOCATIONAL PREPARATION IN JAPAN

Volume V of five volumes

Appendixes

December, 1970

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
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U.S. DEPARTMENT OF HEALTH,
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Appendixes

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Mary Jean Bowman
Hideo Ikeda
Yasumasa Tomoda
Bruce Harker

December, 1970

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Department of Economics and
Comparative Education Center

University of Chicago

Chicago, Illinois

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APPENDIX A

THE STUDENT QUESTIONNAIRE

Translation from the Japanese

by

Ichiro Iwano

(11-12) 1. In what course are you enrolled at present? Encircle the one that applies.

1. General (Preparing for higher education)
2. General (Preparing directly for work)
3. Agricultural
4. Commercial
5. Technical

I. Questions on Occupation and Education of your Parents.

(13) 2. How old is your father?

1. Less than 40. 2. 40-44 3. 45-49
4. 50-54 5. 55-59 6. 60 and over
7. Not living

(14) If your father is dead, at what age did he die?

(15) 1. Less than 30 2. 30-39 3. 40-49
4. 50 and over

(16) 3. Is your father working at present?

1. Yes, he has a fixed job.
2. Yes. Although he has no fixed job status, he sometimes works.
3. No, he is not working.
4. Not living.

4. Next, here are three questions, A, B, C, concerning your father's occupation. If your father is dead or retired, please give your father's previous principal occupation.

(17-19) A. What is your father's principal occupation? If he has a regular position, please state it as exactly as possible: for example, farm operator, night watchman, foreman in a factory, section chief in administration, an independent shop keeper, teacher in a primary school, civil engineer, skipper of a deep-sea fishing boat, etc.

B. Where does your father engage in that job? Describe as exactly as possible: for example, municipal office, Department of Labor, National Railway, Private railway, textile factory; shipyard, private high school, restaurant of a hotel, etc.

(20) C. For what category of employer does he work?

1. Governmental agency.
2. Private corporation.
3. Farmer (Self-employed).
4. In his own or family firm (in commerce and industry): no other employee than family.
5. In his own or a family firm: 1-9 employees other than family.
6. In his own or a family firm: 10 and over employees other than family.
7. Other (Specify:).

(21-25) 5. How many living brothers and sisters have you? Write the number in the ☐

1. Older brothers ☐ 2. Older sisters ☐
3. Younger brothers and sisters ☐

(26) 6. If your family occupation is in independent employment -- for example: independent farming, shopkeeping, factory proprietorship -- will you be the inheritor? Circle the one that applies.

1. Family occupation is not of an independent type.
2. Yes, certainly.
3. Yes, probably.
4. No, probably not.
5. No, definitely not.

(27) 7. Do you expect to go into the same occupation as your father's? Circle the one that applies.

1. Yes, hope and expect to.
2. Would like to, but chances small.
3. Do not want to, but will have to.
4. No, do not want to and will not.

(28-29) 8. What is the last school that each of your parents attended? Circle the appropriate number in the column for your father and in that for your mother.

(30-31)

Father	Mother	
10	10	Ordinary Elementary
20	20	Upper Elementary, New Junior Secondary
26	26	Youth School
30	30	Middle School, Girls' High School, New Senior Secondary (General)
32	32	Normal School
33	33	Vocational: Agriculture, Fishery, New and Old
34	34	Vocational: Technical, Navigation, New and Old (include a school in corporation)
35	35	Vocational Commercial, New and Old
41	41	Higher School, Preparatory
42	42	Higher Normal School
43	43	Professional School, Agriculture and Forest, Fishery
44	44	Professional School, Technical, Navigation, Other Science College
45	45	Professional School, Commercial, Other Liberal Arts College
46	46	Military School at Secondary Level, Army and Navy
56	56	Military School at University Level, Army and Navy
57	57	University (include Graduate School)
58	58	Foreign University
99	99	Other

II. Questions about the Courses in Which You Are at Present Enrolled and How You Selected Them.

(32) 9. Is the type of course in which you are majoring the type you most wanted to follow at the time when you entered secondary school?

1. Yes, it is the course I preferred.
2. No, it is not the course I preferred.

(33) 10. Is the school you are attending the one you most wanted to attend at the time when you entered secondary school?

1. Yes, it is the school I preferred.
2. No, it is not the school I preferred.

(34-43) 11. Did you in fact take the examination for entrance to any other Senior Secondary School or Technical Junior College?

1. Yes, I did.
2. No, I did not.

IF YES, please circle all the courses for which you took examinations, excluding the course in which you are at present.

1. General
2. Agricultural
3. Commercial
4. Technical
5. Homemaking
6. Technical Junior College
7. Other (Specify)

(44) 12. If you were completely free to choose any course according to your own preference and were choosing again, which course would you choose? Circle only one response.

1. The same course
2. General
3. Agricultural
4. Commercial
5. Technical
6. Homemaking
7. Technical Junior College
8. Other (Specify)

If you circled a course other than your present one, answer A and B.

(45) A. What is the chief reason for the preference you expressed in question 12? Circle ONE that applies.

1. It would have been nearer to my home
2. It is the most interesting
3. It is the best suited to my talents and abilities
4. It gives the best chances for going on to higher education
5. It gives the best preparation for the kind of career I would like to follow
6. When you get through this kind of school you can be sure of a good job right away
7. Other (Specify:)

(46) B. Why did you enter your present course, which you dislike? Circle the ONE answer that is most important.

1. This school is nearer to my home
2. My parents wanted me to go to this school and to take this course
3. My teachers in Junior Secondary School wanted me to go to this school and take this course
4. This school and course is less expensive
5. I did not pass the entrance examinations for my preferred school and course
6. I did not know enough about other schools and courses when I decided to go here
7. Other (Specify:)

III. Questions about Entering Higher Schools

(47) 13. If possible, would you like to continue with full time schooling after graduating from your present school?

1. Yes, if possible
2. No, I would not want to continue

(48) 14. Do you plan to take examinations for college or university next spring? Circle one that applies.

1. Yes, full-time university
2. Yes, night university
3. No

(49) 15. Answer only if you would like to continue your study but are unable to enter a college or university. What would be the single most important reason?

1. Difficult to pay the tuition and fees
2. My parents are against my going to college or university
3. Have to help the family business as soon as possible
4. The course in which I am is not appropriate for the entrance examinations
5. My scholastic ability may fail me in the examinations
6. Other (Specify)

(50) 16. Do you plan to go to the first choice university, even if you would spend a year or so as a Ronin when you don't succeed in gaining admission to it next spring? Circle one that applies.

1. I won't go to university anyway.
2. Yes, even if have to spend time as a Ronin.
3. No, would not spend time as a Ronin.
4. Not sure

(51-55) 17. If you were to get a job right after your graduation from high school, which of the following kinds of occupational education would you want to receive? After each item, circle 1 if you have definite plans to take, 2 if you would like to take if possible, 3 if you would not be particularly interested, and 4 if you definitely would not want to take it.

	Have definite plan to take	Probably would take	Probably would not take	Definitely would not take
1. Night University	1	2	3	4
2. Other night school	1	2	3	4
3. Education and training program sponsored by firm	1	2	3	4
4. Correspondence Course	1	2	3	4
5. Other (specify)	1	2	3	4

IV. Finally, Questions about your Views Concerning Occupations.

(11) 18. After graduation from school, in which of the following places would you want to get a job?

1. A farming or fishing village
2. A medium or small-sized city
3. A metropolis (Tokyo, Yokohama, Nagoya, Osaka, Kyoto, Kobe, Kitakyushu or their suburbs)

(12) 19. Do you think you would like to remain in the prefecture where you live at present?

1. Yes, definitely
2. Yes, if possible
3. Prefer to move out
4. Not sure

(13) 20. When you select your occupation, to which of the following five conditions would you give most consideration?

1. A secure job
2. A job that carries respect
3. A well paid job
3. A job that promises rapid promotion
5. A job that is interesting and enjoyable

(14) 21. Among the following four careers, which would you like best? Encircle the one that you prefer.

1. Self-employed job
2. Work for the government
3. Work for a big corporation
4. Work for a medium or small-sized company

(15-20) 22. Suppose you are offered a chance to take any one of the following six careers. Which would you select? Put 1 by your first choice, 2 by the second, and 3 by the third. Be sure to mark three.

_____ 1. Farmer

_____ 2. Independent shop keeper

_____ 3. An office clerk in a big corporation

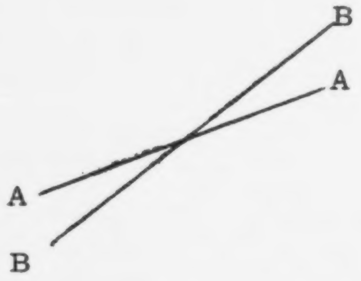
_____ 4. An office clerk in the government

_____ 5. A mechanic in a big corporation

_____ 6. A skilled worker in a small corporation

23. Suppose you started your job as a salaried man, and the total sum of your earnings from the time you start until your retirement would be the same in each alternative. Which of the following would you choose? Assume that there would be no fluctuation of price.

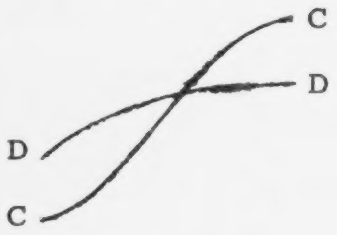
Circle 1 or 2



(21) 1. As line A-A; a job that pays extremely well at first, but where pay increases thereafter are slight

2. As line B-B; a job in which the initial pay is not so good, but the rate of increase in pay is good

(22) Circle 1 or 2



1. As curve C-C; a job for which pay is not so good over the first half of the period but becomes rapidly good in the second half.

2. As curve D-D; a job for which pay is extremely good in the first half of the period but not so good in the second half.

(23) Which of these four earnings curves, A-A, B-B, C-C, D-D, in the figures to the right above, do you think most desirable? Circle the one that you think best.

A-A B-B C-C D-D

(24) Why did you choose it? Write your reason ______________________

____

(25) Among those four curves, circle the one that is most likely to be similar to your future earnings stream.

A-A B-B C-C D-D

(26) 24. Suppose you must get your job at one or the other of the following companies. Which company would you choose? Circle your preference.

1. A company which encourages you to spend your time for education even when you are off-duty

2. A company which takes no interest in stimulating education but leaves you free except for your time on-duty

(27-29) 25. Suppose you seek a job right after your graduation from high school. What is the best job you think you could get? If your job has been decided, write the place where you will work.

____

(30) 26. Has your job been decided already?

1. Yes, already 2. No, not yet

In case it has been decided how did you find that job? Circle the one that applies.

1. Through personal connections.
2. Introduction by your teacher or school.
3. Public Employment Agency.
4. Other (Specify)

(31-33) 27. Suppose you are able to go to college or university. What is the best job you would be likely to be able to get? Explain as fully as possible.

(34-39) 28. If you were to (or expect to) start work right after graduating from high school, how much would you expect to receive per month? (If you will be in an independent, self-employed job, answer according to your best guess.) What do you think your monthly salary for the first year will be, what will it be after five years, and what at the highest you could reach in the future? Circle one answer for each period. Assume that prices do not change.

	First year	After 5 years	At the highest in the future
a. Under 10,000 yen	1	1	1
b. 10,000-20,000 yen	2	2	2
c. 20,000-30,000 yen	3	3	3
d. 30,000-40,000 yen	4	4	4
e. 40,000-60,000 yen	5	5	5
f. 60,000-80,000 yen	6	6	6
g. 80,000-100,000 yen	7	7	7
h. 100,000-120,000 yen	8	8	8
i. 120,000-140,000 yen	9	9	9
j. 140,000-160,000 yen	10	10	10
k. 160,000-200,000 yen	11	11	11
l. 200,000-or more yen	12	12	12

(40-45) 29. Suppose you graduated from a 4-year university and took a job. How much do you think you could earn per month? Assuming prices do not change, circle the digit in each of the following columns that indicates your estimates for your first year of employment, after five years, and at the highest you can reach.

	First Year	After 5 years	At the highest
a. Under 10,000 yen	1	1	1
b. 10,000-20,000 yen	2	2	2
c. 20,000-30,000 yen	3	3	3
d. 30,000-40,000 yen	4	4	4
e. 40,000-60,000 yen	5	5	5
f. 60,000-80,000 yen	6	6	6
g. 80,000-100,000 yen	7	7	7
h. 100,000-120,000 yen	8	8	8
i. 120,000-140,000 yen	9	9	9
j. 140,000-160,000 yen	10	10	10
k. 160,000-200,000 yen	11	11	11
l. 200,000-or more yen	12	12	12

(46-50) 30. Suppose you were given a choice between a gift of 1 million yen now or each of the following sums assured after five years. Circle your choice in each set:

1.	a. Now	100 Manyen
	b. After 5 years	100 Manyen
2.	a. Now	100 Manyen
	b. After 5 years	125 Manyen
3.	a. Now	100 Manyen
	b. After 5 years	150 Manyen
4.	a. Now	100 Manyen
	b. After 5 years	175 Manyen
5.	a. Now	100 Manyen
	b. After 5 years	200 Manyen

(51) 31. Suppose you hit the jack-pot in a "Treasure Lottery" for 100 manyen. How would you use it? Circle one answer.

1. Start my own business
2. Save for the cost of going to university
3. Save in a bank
4. Travel in foreign countries
5. Invest in land
5. Other (Specify:)

(52-54) 32. What job would you imagine in your dreams for after you complete your formal schooling? Cite one job and describe your dream of it as fully as possible.

(55-57) 33. Looking ahead 20-30 years, what kind of work would you like best to be doing and in what sort of organization or employment status? State what you think you are in fact most likely to be doing and describe it fully.

34. Here are some opinions and points of view about which people often disagree. What do you think about each of these opinions? If you agree strongly, circle the number 1 in the first column. If you agree mildly, circle 2 in the second column. If you disagree mildly, circle 3 in the third column, and if you disagree strongly, circle 4. If you cannot say, circle 5. There are no right or wrong answers. Mark exactly as you think yourself. Be sure to circle one of the numbers after each of the statements from a to m.

		Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly	Can't Say
(58)	a. It is better to work at a company where there is promise of promotion and pay increase even though it is a small company rather than to work at a big corporation where there is slight chance of recognition.	1	2	3	4	5
(59)	b. Prospective employers look with suspicion on a man who has made frequent job changes as lacking in qualities of loyalty.	1	2	3	4	5
(60)	c. Since the number of high school graduates has become so numerous recently, the advantages of being a high school graduate are going down.	1	2	3	4	5
(61)	d. Among people who take a job directly after graduation from senior secondary school, career prospects will be better for those who have finished a technical than for those who have finished a general course.	1	2	3	4	5

	Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly	Can't Say
(62) e. It is desirable to expand one's experience by working in various companies and governmental organizations when one is young.	1	2	3	4	5
(63) f. Those who often change their place of employment must start anew each time. Therefore it is disadvantageous.	1	2	3	4	5
(64) g. It is ridiculous to take a job in a small company even at a higher initial salary when one can get a job in a big corporation.	1	2	3	4	5
(65) h. Those who graduated from the general course of high school can be trained to the need of a company. Therefore, the large corporation gives priority to those who graduated from the general course rather than those from the occupational courses.	1	2	3	4	5
(66) i. If one receives education in a company school, etc., it is difficult for him to change his job even though there is a profitable one since he feels moral obligation to the company.	1	2	3	4	5
(67) j. With the number of college graduates increasing so much, it is difficult for even the college graduates to find a job. Therefore the value of going to university and paying the high cost will be going down.	1	2	3	4	5
(68) k. With so many senior high school graduates now, a man will feel small unless he has at least graduated from senior high school.	1	2	3	4	5
(69) l. A man will lead a more fruitful life if he operates an independent business rather than being employed by others.	1	2	3	4	5
(70) m. If a man has his own business, he has too many worries and troubles. Therefore, it might be better to be employed by a stable company if possible.	1	2	3	4	5

(71) 35. When you divide your class into five groups, according to school achievement, what is your achievement ranking? Circle the one that fits.

Upper 1/5	Next Upper 1/5	Middle 1/5	Next Lower 1/5	Lowest 1/5

Please write down whatever you felt difficult in answering and/or you could not understand when you answered this questionaire.

____

____

____

(11-12) 1. In what course are you enrolled at present? Encircle the one that applies.

1. General (Preparing for higher education)
2. General (Preparing directly for work)
3. Agricultural
4. Commercial
5. Technical

I. Questions on Occupation and Education of your Parents.

---

(13) 2. How old is your father?

1. Less than 40.	2. 40-44	3. 45-49
4. 50-54	5. 55-59	6. 60 and over
7. Not living		

(14) If your father is dead, at what age did he die?

(15)

1. Less than 30	2. 30-39	3. 40-49
4. 50 and over		

(16) 3. Is your father working at present?

1. Yes, he has a fixed job.
2. Yes. Although he has no fixed job status, he sometimes works.
3. No, he is not working.
4. Not living.

4. Next, here are three questions, A, B, C, concerning your father's occupation. If your father is dead or retired, please give your father's previous principal occupation.

(17-19) A. What is your father's principal occupation? If he has a regular position, please state it as exactly as possible: for example, farm operator, night watchman, foreman in a factory, section chief in administration, an independent shop keeper, teacher in a primary school, civil engineer, skipper of a deep-sea fishing boat, etc.

____

B. Where does your father engage in that job? Describe as exactly as possible: for example, municipal office, Department of Labor, National Railway, Private railway, textile factory; shipyard, private high school, restaurant of a hotel, etc.

____

(20) C. For what category of employer does he work?

1. Governmental agency.
2. Private corporation.
3. Farmer (Self-employed).
4. In his own or family firm (in commerce and industry): no other employee than family.
5. In his own or a family firm: 1-9 employees other than family.
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1. Older brothers ☐ 2. Older sisters ☐

3. Younger brothers and sisters ☐

(26) 6. If your family occupation is in independent employment -- for example: independent farming, shopkeeping, factory proprietorship -- will you be the inheritor? Circle the one that applies.

1. Family occupation is not of an independent type.
2. Yes, certainly.
3. Yes, probably.
4. No, probably not.
5. No, definitely not.

(27) 7. Do you expect to go into the same occupation as your father's? Circle the one that applies.

1. Yes, hope and expect to.
2. Would like to, but chances small.
3. Do not want to, but will have to.
4. No, do not want to and will not.

17

(28-29) 8. **What is the last school that each of your parents attended? Circle the appropriate number in the column for your father and in that for your mother.**

(30-31)

Father	Mother	
10	10	Ordinary Elementary
20	20	Upper Elementary, New Junior Secondary
26	26	Youth School
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45	45	Professional School, Commercial, Other Liberal Arts College
46	46	Military School at Secondary Level, Army and Navy
56	56	Military School at University Level, Army and Navy
57	57	University (include Graduate School)
58	58	Foreign University
99	99	Other

II. Questions about the Courses in Which You Are at Present Enrolled and How You Selected Them.

(32) 9. Is the type of course in which you are majoring the type you most wanted to follow at the time when you entered secondary school?

1. Yes, it is the course I preferred.
2. No, it is not the course I preferred.

(33) 10. Is the school you are attending the one you most wanted to attend at the time when you entered secondary school?

1. Yes, it is the school I preferred.
2. No, it is not the school I preferred.

(34-43) 11. Did you in fact take the examination for entrance to any other Senior Secondary School or Technical Junior College?

1. Yes, I did.
2. No, I did not.

IF YES, please circle all the courses for which you took examinations, excluding the course in which you are at present.

1. General
2. Agricultural
3. Commercial
4. Technical
5. Homemaking
6. Technical Junior College
7. Other (Specify)

(44) 12. If you were completely free to choose any course according to your own preference and were choosing again, which course would you choose? Circle only one response.

1. The same course
2. General
3. Agricultural
4. Commercial
5. Technical
6. Homemaking
7. Technical Junior College
8. Other (Specify)

If you circled a course other than your present one, answer A and B.

(45) A. What is the chief reason for the preference you expressed in question 12? Circle ONE that applies.

1. It would have been nearer to my home
2. It is the most interesting
3. It is the best suited to my talents and abilities
4. It gives the best chances for going on to higher education
5. It gives the best preparation for the kind of career I would like to follow
6. When you get through this kind of school you can be sure of a good job right away
7. Other (Specify:)

(46) B. Why did you enter your present course, which you dislike? Circle the ONE answer that is most important.

1. This school is nearer to my home
2. My parents wanted me to go to this school and to take this course
3. My teachers in Junior Secondary School wanted me to go to this school and take this course
4. This school and course is less expensive
5. I did not pass the entrance examinations for my preferred school and course
6. I did not know enough about other schools and courses when I decided to go here
7. Other (Specify:)

III. Questions about Entering Higher Schools

(47) 13. If possible, would you like to continue with full time schooling after graduating from your present school?

1. Yes, if possible
2. No, I would not want to continue

(48) 14. Do you plan to take examinations for college or university next spring? Circle one that applies.

1. Yes, full-time university
2. Yes, night university
3. No

(49) 15. Answer only if you would like to continue your study but are unable to enter a college or university. What would be the single most important reason?

1. Difficult to pay the tuition and fees
2. My parents are against my going to college or university
3. Have to help the family business as soon as possible
4. The course in which I am is not appropriate for the entrance examinations
5. My scholastic ability may fail me in the examinations
6. Other (Specify)

(50) 16. Do you plan to go to the first choice university, even if you would spend a year or so as a Ronin when you don't succeed in gaining admission to it next spring? Circle one that applies.

1. I won't go to university anyway.
2. Yes, even if have to spend time as a Ronin.
3. No, would not spend time as a Ronin.
4. Not sure

(51-55) 17. If you were to get a job right after your graduation from high school, which of the following kinds of occupational education would you want to receive? After each item, circle 1 if you have definite plans to take, 2 if you would like to take if possible, 3 if you would not be particularly interested, and 4 if you definitely would not want to take it.

	Have definite plan to take	Probably would take	Probably would not take	Definitely would not take
1. Night University	1	2	3	4
2. Other night school	1	2	3	4
3. Education and training program sponsored by firm	1	2	3	4
4. Correspondence Course	1	2	3	4
5. Other (specify)	1	2	3	4

IV. Finally, Questions about your Views Concerning Occupations.

(11) 18. After graduation from school, in which of the following places would you want to get a job?

1. A farming or fishing village
2. A medium or small-sized city
3. A metropolis (Tokyo, Yokohama, Nagoya, Osaka, Kyoto, Kobe, Kitakyushu or their suburbs)

(12) 19. Do you think you would like to remain in the prefecture where you live at present?

1. Yes, definitely
2. Yes, if possible
3. Prefer to move out
4. Not sure

(13) 20. When you select your occupation, to which of the following five conditions would you give most consideration?

1. A secure job
2. A job that carries respect
3. A well paid job
3. A job that promises rapid promotion
5. A job that is interesting and enjoyable

(14) 21. Among the following four careers, which would you like best? Encircle the one that you prefer.

1. Self-employed job
2. Work for the government
3. Work for a big corporation
4. Work for a medium or small-sized company

(15-20) 22. Suppose you are offered a chance to take any one of the following six careers. Which would you select? Put 1 by your first choice, 2 by the second, and 3 by the third. Be sure to mark three.

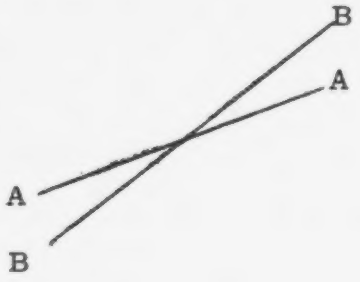
_____ 1. Farmer
_____ 2. Independent shop keeper
_____ 3. An office clerk in a big corporation
_____ 4. An office clerk in the government
_____ 5. A mechanic in a big corporation
_____ 6. A skilled worker in a small corporation

23. Suppose you started your job as a salaried man, and the total sum of your earnings from the time you start until your retirement would be the same in each alternative. Which of the following would you choose? Assume that there would be no fluctuation of price.

Circle 1 or 2

(21) 1. As line A-A; a job that pays extremely well at first, but where pay increases thereafter are slight

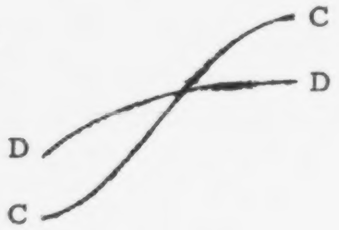
2. As line B-B; a job in which the initial pay is not so good, but the rate of increase in pay is good



(22) Circle 1 or 2

1. As curve C-C; a job for which pay is not so good over the first half of the period but becomes rapidly good in the second half.

2. As curve D-D; a job for which pay is extremely good in the first half of the period but not so good in the second half.



(23) Which of these four earnings curves, A-A, B-B, C-C, D-D, in the figures to the right above, do you think most desirable? Circle the one that you think best.

A-A   B-B   C-C   D-D

(24) Why did you choose it? Write your reason ____________________

____

(25) Among those four curves, circle the one that is most likely to be similar to your future earnings stream.

A-A   B-B   C-C   D-D

(26) 24. Suppose you must get your job at one or the other of the following companies. Which company would you choose? Circle your preference.

1. A company which encourages you to spend your time for education even when you are off-duty

2. A company which takes no interest in stimulating education but leaves you free except for your time on-duty

(27-29) 25. Suppose you seek a job right after your graduation from high school. What is the best job you think you could get? If your job has been decided, write the place where you will work.

____

(30) 26. Has your job been decided already?

1. Yes, already 2. No, not yet

In case it has been decided how did you find that job? Circle the one that applies.

1. Through personal connections.
2. Introduction by your teacher or school.
3. Public Employment Agency.
4. Other (Specify)

(31-33) 27. Suppose you are able to go to college or university. What is the best job you would be likely to be able to get? Explain as fully as possible.

(34-39) 28. If you were to (or expect to) start work right after graduating from high school, how much would you expect to receive per month? (If you will be in an independent, self-employed job, answer according to your best guess.) What do you think your monthly salary for the first year will be, what will it be after five years, and what at the highest you could reach in the future? Circle one answer for each period. Assume that prices do not change.

	First year	After 5 years	At the highest in the future
a. Under 10,000 yen	1	1	1
b. 10,000-20,000 yen	2	2	2
c. 20,000-30,000 yen	3	3	3
d. 30,000-40,000 yen	4	4	4
e. 40,000-60,000 yen	5	5	5
f. 60,000-80,000 yen	6	6	6
g. 80,000-100,000 yen	7	7	7
h. 100,000-120,000 yen	8	8	8
i. 120,000-140,000 yen	9	9	9
j. 140,000-160,000 yen	10	10	10
k. 160,000-200,000 yen	11	11	11
l. 200,000-or more yen	12	12	12

(40-45) 29. Suppose you graduated from a 4-year university and took a job. How much do you think you could earn per month? Assuming prices do not change, circle the digit in each of the following columns that indicates your estimates for your first year of employment, after five years, and at the highest you can reach.

	First Year	After 5 years	At the highest
a. Under 10,000 yen	1	1	1
b. 10,000-20,000 yen	2	2	2
c. 20,000-30,000 yen	3	3	3
d. 30,000-40,000 yen	4	4	4
e. 40,000-60,000 yen	5	5	5
f. 60,000-80,000 yen	6	6	6
g. 80,000-100,000 yen	7	7	7
h. 100,000-120,000 yen	8	8	8
i. 120,000-140,000 yen	9	9	9
j. 140,000-160,000 yen	10	10	10
k. 160,000-200,000 yen	11	11	11
l. 200,000-or more yen	12	12	12

(46-50) 30. Suppose you were given a choice between a gift of 1 million yen now or each of the following sums assured after five years. Circle your choice in each set:

1.	a. Now	100 Manyen
	b. After 5 years	100 Manyen
2.	a. Now	100 Manyen
	b. After 5 years	125 Manyen
3.	a. Now	100 Manyen
	b. After 5 years	150 Manyen
4.	a. Now	100 Manyen
	b. After 5 years	175 Manyen
5.	a. Now	100 Manyen
	b. After 5 years	200 Manyen

(51) 31. Suppose you hit the jack-pot in a "Treasure Lottery" for 100 manyen. How would you use it? Circle one answer.

1. Start my own business
2. Save for the cost of going to university
3. Save in a bank
4. Travel in foreign countries
5. Invest in land
5. Other (Specify:)

(52-54) 32. What job would you imagine in your dreams for after you complete your formal schooling? Cite one job and describe your dream of it as fully as possible.

(55-57) 33. Looking ahead 20-30 years, what kind of work would you like best to be doing and in what sort of organization or employment status? State what you think you are in fact most likely to be doing and describe it fully.

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34. Here are some opinions and points of view about which people often disagree. What do you think about each of these opinions? If you agree strongly, circle the number 1 in the first column. If you agree mildly, circle 2 in the second column. If you disagree mildly, circle 3 in the third column, and if your disagree strongly, circle 4. If you cannot say, circle 5. There are no right or wrong answers. Mark exactly as you think yourself. Be sure to circle one of the numbers after each of the statements from a to m.

		Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly	Can't Say
(58)	a. It is better to work at a company where there is promise of promotion and pay increase even though it is a small company rather than to work at a big corporation where there is slight chance of recognition.	1	2	3	4	5
(59)	b. Prospective employers look with suspicion on a man who has made frequent job changes as lacking in qualities of loyalty.	1	2	3	4	5
(60)	c. Since the number of high school graduates has become so numerous recently, the advantages of being a high school graduate are going down.	1	2	3	4	5
(61)	d. Among people who take a job directly after graduation from senior secondary school, career prospects will be better for those who have finished a technical than for those who have finished a general course.	1	2	3	4	5

	Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly	Can't Say
(62) e. It is desirable to expand one's experience by working in various companies and governmental organizations when one is young.	1	2	3	4	5
(63) f. Those who often change their place of employment must start anew each time. Therefore it is disadvantageous.	1	2	3	4	5
(64) g. It is ridiculous to take a job in a small company even at a higher initial salary when one can get a job in a big corporation.	1	2	3	4	5
(65) h. Those who graduated from the general course of high school can be trained to the need of a company. Therefore, the large corporation gives priority to those who graduated from the general course rather than those from the occupational courses.	1	2	3	4	5
(66) i. If one receives education in a company school, etc., it is difficult for him to change his job even though there is a profitable one since he feels moral obligation to the company.	1	2	3	4	5
(67) j. With the number of college graduates increasing so much, it is difficult for even the college graduates to find a job. Therefore the value of going to university and paying the high cost will be going down.	1	2	3	4	5
(68) k. With so many senior high school graduates now, a man will feel small unless he has at least graduated from senior high school.	1	2	3	4	5
(69) l. A man will lead a more fruitful life if he operates an independent business rather than being employed by others.	1	2	3	4	5
(70) m. If a man has his own business, he has too many worries and troubles. Therefore, it might be better to be employed by a stable company if possible.	1	2	3	4	5

(71) 35. When you divide your class into five groups, according to school achievement, what is your achievement ranking? Circle the one that fits.

Upper 1/5	Next Upper 1/5	Middle 1/5	Next Lower 1/5	Lowest 1/5

Please write down whatever you felt difficult in answering and/or you could not understand when you answered this questionaire.

____

____

____

APPENDIX C

THE REPORTING OF FATHER'S SCHOOLING AND OCCUPATION BY JAPANESE STUDENTS AND THEIR FATHERS*

Occupation and educational attainment of fathers are major indices of social class origins and are indispensable as independent variables in many sociological and economic analyses. Nevertheless, few sociologists have paid much attention to the reliability with which such information about parents is reported, or to the substantively interesting questions relating to patterns of disagreement in sons' and parents' designation. One study did point out that American business leaders exaggerated their upward mobility by understating their social class origins; this bias perhaps reflects the "rags to riches" traditional ethic of American individualism. In other situations the bias might be reversed. Furthermore, distortions may result when respondents report parental occupation on the basis of insufficient information and adjust their reports in part by inference from other parental traits. In this article we will compare Japanese sons' estimates of father's education and his occupational level and type with the self-classifications by fathers.[1]

The parental population covered by our survey is fathers of senior students in a set of senior-secondary schools in central and western Japan in the autumn of 1966. This is not a general probability sample but a stratified one, representing schools of all types in five cities and in four rural areas. A student's questionnaire (administered in classrooms) asked for paternal occupation and schooling. Questionnaires filled out by fathers were of three types: one for fathers who were salary and wage earners, a second for non-farm self-employed men, and a third for farmers. Each student chose the appropriate questionnaire for his father. The fathers' responses were returned in sealed envelopes and earlier responses of students were then compared with the self-reports from the fathers. (In this article, responses of female students and those from farmers' offspring are excluded.)

Nearly 3500 (69%) of the fathers' questionnaires were returned, but a few pairs were excluded because replies were from older brothers or other male heads of the households, and hence were ineligible. On eligible returned questionnaires, the father's non-response rate for education was 2.5 percent and for occupation 3.6 percent; non-response on these items by sons was 9.3 and 8.8 percent respectively.

The proportions of fathers returning questionnaires did not vary appreciably by educational level, ranging from a low of 65 percent among university graduates to a high of 69 percent among graduates of senior secondary schools. The return rate varied little with the status level of father's occupation (Table 1). Sons' non-response rates on occupation and education were also quite evenly distributed on their social class origins, as shown in Table 2. However, as we should expect, both the non-return rate of fathers' questionnaires and the sons' non-response rates on father's education ~~are~~ were highest when father's occupational status level was lowest. Taking the evidence of Table 2 into account, and assuming that the proportion of sons who failed to report father's status when that status was in fact 8 was the same when the father did not return a questionnaire as when he did return one, the estimated proportion of fathers at level 8 who returned questionnaires is reduced to 54 percent; this may still be a slightly optimistic figure, however, and it is safer to say merely that about half returned them. However, this double round in estimation of questionnaire return rates by occupational level affects none of the other status levels. Similar adjustments for questionnaire returns by father's education have a quite different effect; they lower slightly the estimated proportions of fathers with university education who returned their questionnaires (from our initial estimate, in Table 1, of 65 percent to 62 percent); but they raise the return rate among those with higher school but not university education. The revised estimates of fathers' return rates by education, going from the highest to lowest education level, are: 62.1, 67.8, 69.[illegible], 67.5. It is known that non-returns on social surveys often are distinctive populations; we find no reason for suspecting, however, that this introduces any systematic bias into a comparison of father-son responses among those for whom such comparisons can be made.[2]

Throughout, the findings are presented separately for employee and for self-employed fathers. In many respects these are quite distinctive categories, both in the actualities of their lives and in the problems they pose for occupational status classification and coding in particular. Presentation of the two groups separately has two major, interrelated advantages. It

TABLE 1

Return Rate of Father's Questionnaires by Father's Education and Occupational Status

Father's Occupational Status (as reported by Students)	Return Rate	Father's Education (as reported by Students)	Return Rate
1	67.8	University	65.0
2	74.4	Higher School	65.2
3	66.7	Upper Secondary	69.0
4	66.2	Elementary	68.4
5	66.2	Total	68.1
6	69.0		
7	68.5		
8	59.0		
Total	67.4		

TABLE 2

Son's Non-response on Father's Occupational Status and Education by Father's Occupational Status and Education*

Father's Occupational Status (as reported by Fathers)	Non-response Rate on Father's Occupational Status	Father's Education (as reported by Fathers)	Non-response Rate on Father's Education
1	6.6	University	5.0
2	8.2	Higher School	10.1
3	6.8	Upper Secondary	10.5
4	9.1	Elementary	8.1
5	8.8	Total	9.3
6	6.9		
7	8.2		
8	17.3		
Total	8.8		

---

*Within the cases in which both Fathers' and sons' questionnaires were returned.

provides a strong sensitivity check on the stability of patterns of deviance between father and son reporting of parental traits, and it provides clues that facilitate the tracking down and separating out of sources of deviations that arise from particular circumstances or characteristics of the parental population.

I. Comparisons of Reports on Education

Students and fathers were asked identical questions about parental education, its level and type, in a form that was pre-coded. There is no possibility of coding error for these data.[3] Tables 3A and 3B compare the two sets of responses in detail. In about four fifths of the cases (among both employed and self-employed) the son gave the same response as his father. In Tables 4A and 4B responses are compared for school level alone, excluding data about type of school; on this simpler comparison about 87 percent of the self-employed and 85 percent of the salary and wage-earner fathers agreed with their sons.

If it is assumed that the father's response is a true and unbiased report of his schooling, we can interpret the deviations of sons' from fathers' reports as evidence either of son's ignorance or of deliberate bias in reporting. If we look at Tables 4A and 4B from this point of view and ask whether sons whose answers are "wrong" tend to deviate upward or downward from what their fathers report, the first impression, from the percentages in the last two lines of each part of the table, might be that there is no bias either way among sons of wage and salaried employees but some downward bias among sons of self-employed men who report themselves as senior secondary school

Table 3 Detailed Comparisons of Student and Father Reports of Father's Education

Father's Education as Reported by Students	Father's Education as Reported by Fathers (Education Codes)													
	(20)	(30)	(32)	(33)	(34)	(35)	(41)	(42)	(43)	(44)	(45)	(46)	(57)	Total
	A. Fathers in Wage and Salaried Employment													
Elementary														
(20)	973	33	4	6	11	9	1			3		2	2	1,044
Upper Secondary														
(30) Academic	49	165		9	8	16		1		3	1	3		255
(32) Normal	4	2	26					2						34
(33) Agricultural	1	7		26					1					35
(34) Technical	10	10			79			1		7				107
(35) Commercial	8	21			1	78					3		1	112
"Higher School"														
(41) Academic	4	8		1		4	4			3	4		2	30
(42) Normal		2	15					3		1	1			22
(43) Agricultural	1	1		1					1					4
(44) Technical					14				1	38			1	54
(45) Commercial	2	1				7					23		2	35
(46) Military	5	2					1				1	8		17
University														
(57)	1	7	3		3		2	1	1	10	17		80	125
TOTAL	1,058	259	48	43	116	114	8	8	4	65	50	13	88	1,874

Table 3 (continued)

	(20)	(30)	(32)	(33)	(34)	(35)	(41)	(42)	(43)	(44)	(45)	(46)	(57)	Total
	B. Self-employed Fathers													
Elementary														
(20)	667	16		2	8	7							1	701
Upper Secondary														
(30) Academic	34	74		2	4	11					2	1	1	129
(32) Normal			4							1				5
(33) Agricultural	3			11					1		1			16
(34) Technical	7	4			26	2				4				43
(35) Commercial	7	14			1	47								69
"Higher School"														
(41) Academic	1	3			1	2					1			8
(42) Normal		1												1
(43) Agricultural	1			1										2
(44) Technical	3				1					8				12
(45) Commercial	4	1				3		1			5			14
(46) Military	1	1				2						4		8
University														
(57)		4					1			7	1	1	24	38
TOTAL	728	118	4	16	41	74	1	1	1	20	10	6	26	1,046

graduates. Obviously, at the extremes deviations can only be upward for elementary school fathers and downward for fathers with university education; it is notable that at the extremes the percentages deviating upward and downward are very close in all the relevant cases in Table 4, ranging from 9. 1 to 7. 7 percent. However, if sons' deviant reports were randomly distributed among schooling levels in the proportions in which the total sample of fathers distribute themselves among those levels, we should expect a much larger proportion of the "errors" to be below fathers' reports than is shown in the last two lines of sections A and B of Table 4. The expectancy ratios take this into account, and enable us at the same time to consider what would be involved if we reversed our assumptions concerning whose responses were the more nearly "true" ones. The cells with ratios to expectancy exceeding 1. 0 are in all cases cells in which fathers and sons agreed (by far the highest ratios) or cells in which sons reported higher schooling attainment of their fathers than was reported by the fathers themselves. The highest ratios in other than diagonal cells, it should be noted, are in the cells in which sons report university while fathers report "higher" schools. This will not surprise anyone familiar with the history of the Japanese educational system.[4]

Education systems differ from country to country, and even in the same country the system changes over time. Henc the proportion of agreements in response might be higher in another country because the Japanese school system was drastically altered after the war. Today Japanese sons may have confused ideas as to what the system was like when their

Table 4. Comparison of Student and Father Reports of Father's Level of Schooling[a]

Father's Education as reported by Students	Father's Education as Reported by Fathers					
	Elementary	Secondary	"Higher"	University	Total N	Percentage
A. Fathers in Wage and Salaried Employment						
Elementary (20)	973 1.7	63 0.2	6 0.1	2	1,044	55.7
Secondary (30)to(35)	72 0.2	448 2.7	22 0.5	1	543	29.0
"Higher" (41)to(46)	12 0.1	56 1.1	89 7.0	5 0.7	162	8.6
University (57)	1	13 0.3	31 3.1	80 13.6	125	6.7
Total N	1,058	580	148	88	1,874	
Percentage	56.5	30.9	7.9	4.7		100.0
Son's Upgrading (%)	8.0	11.9	20.9	-		
Son's Downgrading (%)	-	10.9	18.9	9.1		
B. Self-employed Fathers						
Elementary (20)	667 1.4	33 0.2	0	1 0.1	701	67.0
Secondary (30)to(35)	51 0.3	200 3.2	10 1.0	1 0.2	262	25.0
"Higher" (41)to(46)	10 0.3	16 1.5	19 11.1	0	45	4.3
University (57)	0	4 0.4	10 7.1	24 26.7	38	3.6
Total N	728	253	39	26	1,046	
Percentage	69.6	24.2	3.7	2.5		100.0
Son's Upgrading (%)	8.4	7.9	25.6	-		
Son's Downgrading (%)	-	13.0	25.6	7.7		

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[a] Numbers in italics are ratios to expectancy

fathers were in school. Comparable analyses of children's responses about parental status for other countries are not known to us except for one Swedish study.[5] Comparison of the Swedish and Japanese data is designed to deal with these three interesting questions. 1) How much difference exists between the proportion of agreement of father with son in Japan and Sweden? 2) Do Swedish sons exaggerate paternal education to the degree observed in Japan? 3) Are the response discrepancies otherwise similar in Sweden to those found in Japan?

In the Swedish study, eight educational categories were used: 1) lower and upper-elementary school, 2) academic stream in upper-elementary or lower-secondary school, 3) academic higher-secondary school, 4) normal school, 5) commercial and technical schools, 6) university, 7) adult education courses, 8) others and non-response.[6] This list reflects some differences between Swedish and Japanese schools. For example, Sweden has not had schools comparable to the older Japanese "higher schools," and Japan does not have academic streams in upper-elementary schools (like the **Swedish** realskola). Therefore, we combined Swedish categories 1) and 2) **to align** them with the Japanese 8-9 year elementary school. The Japanese senior-secondary and junior-college types were combined to approximate the Swedish schools between upper-elementary and university levels. Adult education and "other schools" were excluded from the Swedish data.

In Sweden 88 percent and in Japan 84-85 percent of father and son responses agreed (Table 5). Patterns of deviation may be perceived more readily by examining the ratios of actual to expected or random cell frequencies.

Table 5. Distributions of Japanese and Swedish Fathers' and Sons' Reports of Father's Education[a]

A. Swedish Data

Son \ Father	I	II	III	IV	V	Total N	%
I. Lower and Upper Elementary School	781 *1.3*	6 *0.1*	2 *0.2*	34 *0.6*	--	823	76.2
II. Academic Secondary School	4 *	80 *6.7*	4 *2.7*	13 *1.4*	30 *2.3*	131	12.1
III. Normal School	---	---	5 *83.3*	---	---	5	0.5
IV. Technical and Commercial School	2 *0.1*	5 *2.0*	---	20 *11.1*	---	27	2.5
V. University	---	9 *1.0*	1 *3.3*	5 *0.8*	79 *8.4*	94	8.7
Total N	787	100	12	72	109	1,080	
Total Percentage	72.9	9.2	1.1	6.7	10.1		100.0

B. Data for Japanese in Wage and Salaried Employment

Son \ Father	I	II	III	IV	V	Total N	%
I. Lower and Upper Elementary School	973 *1.7*	34 *0.2*	4 *0.1*	31 *0.1*	2 *	1,044	55.7
II. Academic Secondary School	53 *0.3*	177 *4.3*	1 *0.1*	52 *0.8*	2 *0.2*	285	15.2
III. Normal School	4 *0.1*	4 *0.5*	46 *27.0*	2 *0.2*	---	56	3.0
IV. Technical, Commercial, and Agricultural School	27 *0.1*	43 *0.8*	1 *0.1*	289 *3.7*	4 *0.2*	364	19.4
V. University	1 *	9 *0.5*	4 *1.0*	31 *1.1*	80 *13.3*	125	6.7
Total N	1,058	267	56	405	88	1,874	
Total Percentage	56.5	14.2	3.0	21.6	4.7		100.0

Table 5. (continued)

C. Data for Japanese Self-employed

Son \ Father	I	II	III	IV	V	Total N	%
I. Lower and Upper Elementary School	667 *1.4*	16 *0.2*	---	17 *0.2*	1 *0.1*	701	67.0
II. Academic Secondary School	35 *0.4*	77 *4.8*	---	24 *1.1*	1 *0.3*	137	13.1
III. Normal School	---	1 *1.4*	4 *133.3*	1 *1.0*	---	6	0.6
IV. Technical, Commercial, and Agricultural School	26 *0.2*	20 *1.1*	1 *1.3*	117 *4.5*	---	164	15.7
V. University	---	5 *1.3*	---	9 *1.5*	24 *26.7*	38	3.6
Total N	728	119	5	168	26	1,046	
Total Percentage	69.6	11.4	0.5	16.0	2.5		100.0

* Ratio less than 0.05
--- None

[a] Numbers in italics are ratios to expectancy

The non-diagonal ratios close to or exceeding unity follow distinct patterns, as follows:

1) Swedish sons or fathers report academic-secondary school where the fathers or sons respectively report university,

2) Japanese sons and fathers "confuse" technical and commercial school with university,

3) Both Swedish and Japanese sons or fathers report technical and commercial school where the fathers and sons respectively specify academic secondary school.

These instances indicate that the pattern of disagreement is on the whole similar in both national sets of data -- with one interesting difference. In Sweden academic (but not technical or commercial) secondary school tends to be mistaken for university, whereas in Japan it is the technical and commercial schools that tend to be mistaken for university.

Taking education level alone (by merging all types of secondary school), agreement ranges only from 91 percent in Sweden to 89 percent for Japanese self-employed men and 88 percent for the wage and salary earners. As Table 6 reveals, the considerable minority of Swedish sons who report lower levels of paternal schooling when their fathers claim university education is not paralleled by any tendency to upgrade fathers who report only elementary education. In Japan, as already noted, deviations were in the other direction; students tended to promote their fathers from higher secondary to university levels, and proportions up-grading fathers who reported elementary school only matched the proportions down-grading fathers who reported university education.

Table 6: Ratios to Expectancy in Summary Distributions of Swedish and Japanese Fathers' and Sons' Reports of Father's Level of Educational Attainment

Education as Reported by Sons		Education as Reported by Fathers 1	2	3	Total (N)	Total (Percentage)
A. Swedish						
1 Elementary		781 1.3	42 0.3	0 --	823	76.2
2 Secondary		6 *	127 4.5	30 1.9	163	15.1
3. University		0 --	15 0.9	79 8.8	94	8.7
Total	(N)	787	184	109	1,080	
	(Percentage)	72.9	17.0	10.1		100.0
Son's Upgrading (%)		0.8	8.2	-		
Son's Downgrading (%)		-	22.8	27.5		
B. Japanese in Wage and Salaried Employment						
1 Elementary		973 1.7	69 0.2	2 *	1,044	55.7
2 Secondary		84 0.2	615 2.2	6 0.7	705	37.6
3 University		1 *	44 0.9	80 13.6	125	6.7
Total	(N)	1,058	728	88	1,874	
	(Percentage)	56.5	38.8	4.7		100.0
Son's Upgrading (%)		8.0	6.0	--		
Son's Downgrading (%)		--	9.5	9.1		
C. Japanese, Self-employed						
1 Elementary		667 1.4	33 0.2	1 *	701	67.1
2 Secondary		61 0.3	245 2.9	1 0.1	307	29.3
3 University		0 --	14 1.3	24 26.7	38	3.6
Total	(N)	728	292	26	1,046	
	(Percentage)	69.6	27.9	2.5		100.0
Son's Upgrading (%)		8.4	4.8	--		
Son's Downgrading (%)		--	11.3	7.7		

* Ratio less than 0.05

--- None

II. Degrees of Agreement on Occupation Responses

The questions asked of students and fathers that were used in the coding of father's occupation are given in the appendix. Several things should be borne in mind in reading those questions. First of all, the student questionnaires were administered in class rooms by a small group of men who had shared in the formulation of the questionnaires and participated in training sessions in which procedures were standardized. In those sessions the importance of obtaining as detailed and specific responses as possible had been stressed, and procedures for accomplishing this had been worked out. Fathers' responses, on the other hand, were self-administered.[7] This is the reason why we added for the wage and salary workers a separate question concerning "specific position," which was included in Question A for students. The advantage of using a different form of question on the schedules for the self-employed must be evident to anyone who has had any experience with occupational data and with social-status scaling. We felt that questions such as those asked on the student and employee questionnaires would have brought very inadequate responses from self-employed fathers, and that in fact the forms used for the self-employed would make responses more, not less, comparable with those obtained from students under expert guidance. On all questionnaires -- those for students, for employee fathers, and for self-employed fathers -- both industry and occupation questions are involved, along with indications of size of firm and of "position" in it. Although self-employed fathers were asked about number of non-family employees in more detail than on the student questionnaires, that detail was used for other purposes and did not affect occupational status coding, which used only the cruder size categories included on the student forms.

In developing coding plans we examined the 3-digit codes used by the U.S. census, those in the International Standard Classification of Occupations, those in the Japanese census, and the linkages of the Duncan occupational status scale to the U.S. census rubrics. The Japanese Census categories follow the international classification very closely. To facilitate coding in Japan we therefore used the international classifications as a reference book, but we regrouped detailed items and divided some in order to align them with the U.S. classifications and to permit their location on the Duncan scale. The first digit of our codes specified eight status levels, corresponding with Duncan-scale values as follows: 1 = 80+; 2 = 70-79; 3 = 60-69; 4 = 50-59; 5 = 35-49; 6 = 25-34; 7 = 10-24; 8 = below 10, but with a few modifications.[8] The second and third digits specified kinds of activity (summarized below).

As a check in applying the Duncan scale, we examined the findings of a survey made by the Japanese Sociological Society in 1955.[9] Although the number of occupations covered in that survey was limited, the prestige scores of the 32 occupations from the survey matched very closely the Duncan scale and other U.S. studies of the prestige ranking of occupations, with three exceptions: farm owners, priests, and engineers in Japan were considerably lower in prestige than the corresponding occupations in the United States. All three of these occupations are also lower in relative ratings with respect to income and education; they were therefore assigned status level codes lower than on the Duncan scale. Occupational data and classifications were sufficiently refined to obviate the need for making special corrections to take account of the fact, for example, that highway construction in Japan is less mechanized than in the United States.[10]

Coding of the responses was carried out by one of the authors and two Japanese co-workers, one of whom was a sociologist and the other an advanced graduate student in sociology. In order to avoid inconsistencies that might have occurred in spite of close collaboration, all schedules initially coded by co-workers were re-checked. We can think of no reason for systematic bias as between coding on father and student responses.

Tables 7A and 7B compare father's occupational status as assigned by son and by father. About half the sons' responses corresponded exactly to those from the fathers. If we extend "agreement" to embrace one step from exact matching, a little over four-fifths of the responses matched; 80-85 percent agreement on a four-to-five category scale is all one could hope for. In fact we used an eight-category initial scale to reduce the effects of uncertainties of choosing between adjacent status levels; those effects would have been more serious were the scale units fewer. Cases in which we could not identify status within three categories on the eight-unit scale were rare even in the middle ranges; they were coded as non-classifiable on status. Where we were uncertain over a three-level range, the central value of the range was chosen. But this means also that disagreement by one step could occur in coding even where sons and fathers agreed but where information on one of the questionnaires was less complete than on the other. Under these circumstances the criterion of agreement within one step seems the more appropriate one.

Table 7. Distribution of Fathers' and Students' Responses on Father's Occupational Status*

Status as Reported by Students	Status as Reported by Father 1	2	3	4	5	6	7	8	Total (N)	(Percentage)
A. Fathers in Wage and Salaried Employment										
1	21 *30.0*	2 *0.9*	4 *0.7*	1 *0.2*	1 *0.2*				29	1.6
2	8 *3.2*	59 *7.8*	25 *1.3*	7 *0.3*	2 *0.1*	1 *0.1*			102	5.5
3	10 *1.4*	47 *1.7*	201 *2.8*	66 *0.9*	24 *0.4*	8 *0.1*	8 *0.1*	1 *0.1*	365	19.6
4	4 *0.4*	20 *0.7*	82 *1.1*	183 *2.4*	47 *0.8*	13 *0.2*	25 *0.4*	6 *0.5*	380	20.3
5	2 *0.3*	7 *0.3*	33 *0.6*	67 *1.1*	119 *2.5*	26 *0.6*	37 *0.8*	4 *0.4*	295	15.8
6		2 *0.1*	11 *0.2*	20 *0.3*	53 *1.2*	150 *3.6*	43 *0.9*	6 *0.7*	285	15.3
7		2 *0.1*	9 *0.1*	31 *0.4*	50 *0.9*	67 *1.3*	185 *3.1*	16 *1.4*	360	19.3
8				4 *0.4*	1 *0.1*	8 *1.1*	11 *1.4*	25 *16.6*	49	2.6
Total (N)	45	139	365	379	297	273	309	58	1865	
(Percentage)	2.4	7.5	19.6	20.3	15.9	14.6	16.6	3.1		100.0
B. Self-employed Fathers										
1	10 *100.0*		1 *1.3*						11	1.0
2	1 *5.0*	10 *20.0*		1 *0.6*		2 *0.4*			14	1.3
3		19 *6.3*	39 *6.2*	14 *1.5*	7 *0.5*	3 *0.1*			82	7.3
4		7 *1.7*	19 *2.2*	33 *2.6*	27 *1.4*	19 *0.4*	6 *0.3*		111	9.9
5		4 *0.4*	23 *1.0*	55 *1.6*	99 *1.8*	98 *0.8*	23 *0.4*		302	27.0
6		1 *0.1*	4 *0.7*	16 *0.5*	29 *0.6*	206 *1.8*	30 *0.6*		286	25.6
7	1 *0.3*			9 *0.3*	35 *0.7*	110 *0.9*	142 *2.6*	1 *0.9*	298	26.7
8				1 *0.7*	3 *1.3*	1 *0.2*	5 *2.1*	3 *60.0*	13	1.2
Total (N)	12	41	86	129	200	439	206	4	1117	
(Percentage)	1.1	3.7	7.7	11.5	17.9	39.4	18.4	0.3		100.0

* Numbers in italics are ratios to expectancy.

The groupings by main occupational types (our digit 2 codes) were as follows:

Group 1. Educational administrators, teachers, university faculties, and researchers in education. People whose main activity is teaching, including those university faculties whose main activity may be research (Major Group 0-6 of International Classification). In addition, researchers in education and educational administrators of all kinds.

Group 2. Practicing physical scientists, medical practitioners, laboratory technicians, and medical and health personnel. Except engineers who might be associated with public health in some ways but are more easily coded with other engineers of our Group 5.

Group 3. Social-political, artists, performers and athletes. Lawyers, librarians, social workers, writers, artists, performers, athletes, proprietors in the publishing business, and men in religious occupations (0-8, 0-9, 0-Y2, 0-Y3, 2-99, and 36, 2-61, and 9-71 of International Classification).

Group 4. Administrative, clerical, and sales personnel, except those specified in other groups. Most of Major Group 1, and all of Major Groups 2 and 3 of the International Classification.

Group 5. Engineering-technical-technological groups and also all production or processing workers and those in the extractive industries. Architects, engineers, surveyers, draughtmen, and industrial technicians, miners, quarrymen and related workers, craftsmen, production workers (0-0, 0-X1, 0-X2, Major Group 5, and 7/8 of International Classification).

Group 6. Military personnel, non-military protective services, personal pervices, communication and transportation occupations. Most of Major Groups 9 and 6 of International Classification.

Group 7. Agriculture, Fishing, and forestry. All engaged in these sectors (0-2, 4, and some of Group 1 of the International Classification).

Agreement between fathers and sons for occupational type was 80 percent for wage and salary workers and 78 percent for the self-employed (see Tables 8A and 8B). For our more detailed (digit 3) types of activity

Table 8. Distribution of Fathers' and Students' Responses on Father's Occupation by Main Type of Occupation

Occupation Type as reported by Students	Occupation Type as Reported by Fathers							Total	
	1	2	3	4	5	6	7	N	Percent
A. Fathers in Wage and Salaried Employment									
1 Educational Administrators and Teachers at all levels	96 16.6			6 0.2		2 0.1		104	5.4
2 Medical and Health Personnels	1 0.6	18 60.0		5 0.5	3 0.3	2 0.4		29	1.5
3 Social-Political Occupations, Artists, Performers, and Athletes			21 52.5	5 0.5	2 0.2			28	1.5
4 Administrative, Clerical, and Sales Personnels	7 0.2	4 0.5	4 0.5	529 2.2	64 0.3	55 0.4	8 0.5	671	35.0
5 Engineering and Processing Occupations	2 0.1	1 0.1		92 0.4	555 2.4	28 0.2	2 0.1	680	35.5
6 Communication, Transportation, protective and personal service Occupations	1 0.1			47 0.4	25 0.2	280 4.1	2 0.2	355	18.5
7 Agriculture, Fishing, and Forestry Occupations				10 0.6	5 0.3	3 0.3	32 29.1	50	2.6
Total N	107	23	25	694	654	370	44	1917	100.0
Percent	5.6	1.2	1.3	36.2	34.1	19.3	2.3		
Table 8 (continued)									
B. Self-employed Fathers									
1 Educational Administrators and Teachers at all levels	1							1	0.1
2 Medical and Health Personnels		17 56.7	1 0.3	1 0.1				19	1.7
3 Social-Political Occupations, Artists, Performers, and Athletes			10 50.0		3 0.6	1 0.6		14	1.3
4 Administrative, Clerical, and Sales Personnels		2 0.2	6 0.6	478 1.6	121 0.5	31 0.4	1 0.1	639	57.2
5 Engineering and Processing Occupations		1 0.2	2 0.4	40 0.3	256 2.4	3 0.1	1 0.1	303	27.1
6 Communication, Transportation, protective and personal service Occupations				11 0.2	8 0.2	87 7.4		106	9.5
7 Agriculture, Fishing, and Forestry Occupations				2 0.1	9 0.7	1 0.3	23 28.8	35	3.1
Total N	1	20	19	532	397	123	25	1117	100.0
Percent	0.1	1.8	1.7	47.6	35.6	11.0	2.2		

within these major groups, there was 60 percent father-son agreement for self-employed fathers and 56 percent for fathers in wage and salary jobs. These matched cases for detailed occupational type were compared further for status level. Taking these successive comparisons together, 36 percent of the responses for employed and 37 percent for self-employed correspond exactly with those of their sons. If we include codes one step different in status level, the agreement was respectively 59 and 51 percent for three successive comparisons. To interpret these findings, however, it is necessary to look more carefully into the patterns of deviation in response.

III. Patterns of Divergence in Fathers' and Sons' Reports

A summary view of over-all distributions of sons' versus fathers' reports of paternal occupational status can be read from the margin percentages (vertical and horizontal) of Table 7. For those in wage and salaried employment, the proportion of sons' responses coded on status levels 1 and 2 is slightly smaller than proportions so coded by fathers, and a few more sons' than fathers' responses are at levels 6 or 7; in brief, there was a mild tendency for sons to under- rather than to over-state paternal occupational status relative to fathers' reports. However, the over-all distributions are quite alike.

Among the self-employed there was a similar tendency for sons' reports to downgrade fathers who classed themselves at the upper status levels, but the most striking discrepancy is in the distributions of responses among levels 5, 6, and 7. Whereas the numbers coded at these levels on responses from sons were about even, fathers were much more likely to give replies that rated them in status level 6, and correspondingly less likely to be coded level 5 or 7. Many of these men (along with a few in status 4) were retail proprietors, inn keepers, and so on. In this connection it should be noted that most of the discrepancies in the status codes from sons and fathers where the fathers were independent retailers would have been eliminated had we used the standard practice of merely distinguishing retail proprietors in assigning status codes to them. The supplementing of this with information on size of operations introduces a larger factor of ignorance into students' responses, although effects are minor if we use agreement within one step as the criterion. Furthermore, none of the cells in which self-employed fathers had reported themselves as status 6 had ratios to expectancy of 1.0 or more except where sons also gave responses coded status 6. In part, the deviations around 6 seem (and are) large because a large proportion of both fathers and sons gave responses that put fathers in the range 5 through 7 on the status codes. With occupational status as with schooling, absolute differences between percentages reported by fathers and by sons will be larger merely by chance when the category has many members. The differences in status as reported by sons and fathers may be re-evaluated by considering patterns of relative discrepancies between sons' and fathers' reports at each status level, taking father's and son's responses in turn as the reference base.

The left hand sections of Table 9 show the distribution of upward and downward deviations in sons' reports for each status level as reported by fathers, while the right hand sections show distributions of upward and downward deviations in fathers' reports relative to sons' ratings.[11] Columns 11-12 provide a summary of the extent to which sons' deviations upgrade estimates relative to fathers' deviations. If we supposed fathers' reports to be "true", this would measure sons' ignorance and deliberate biases. If we count only deviations of two steps or more (column 12), among the self-employed the net upgrading by sons is +9.1 percent; 9.1 percent of the fathers of sons who reported status 1 reported themselves below level 2, but in no case did a son rate his father below 2 when the father reported himself at level 1. (The figure +9.1 is 0 - (-9.1).) On the other hand, for all other levels among the self-employed and for all levels among employees (except the lowest) the net bias was in the other direction; i.e., sons' deviations were downward relative to fathers' deviations. Among the employees there is a relatively smooth drop in two-step bias, from highest relative values in deviations of sons versus fathers at top status ranks. This is partially a regression from the top toward the middle, but it is not matched by a comparable net upward bias of sons' reports at the bottom. Among the self-employed, on the other hand, the pattern of sons' negative values is more erratic, with most extreme net negative figures at status levels 3 and 5.

For main occupation "types" the overall distributions of responses of employee fathers and their sons were again very close, as margin

Table 9

Analysis of Direction of Deviations between Fathers' and Students'
Reports of Father's Occupational Status

Occupational Status	Deviations of Students Reports from Those of Their Fathers					Deviations of Fathers' Reports from Those of the Students					Net Student Up-Grading of Fathers	
		Students" Reports as Percentages of Column (1)					Fathers' Reports as Percentages of Column (6)					
	Total Reported by Fathers	Deviating by One Status Level		Deviating by Two or More Status Levels		Total Reported by Students	Deviating by One Status Level		Deviating by Two of More Status Levels		By One Step or More	By Two Steps or More
		Up	Down	Up	Down		Up	Down	Up	Down		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	A. Fathers in Wage and Salaried Employment						A. Fathers in Wage and Salaried Employment					
1. 80-	45	*	17.8	*	35.6	29	*	6.9	*	20.7	-25.8	-14.9
2. 70-79	139	1.4	33.8	*	22.3	102	7.8	24.5	*	9.8	-28.2	-12.5
3. 60-69	365	6.8	22.5	1.1	14.5	365	12.9	18.1	2.7	11.2	-15.4	-4.9
4. 50-59	379	17.4	17.7	2.1	14.5	380	21.6	12.4	6.3	11.6	-16.6	-7.1
5. 35-49	297	15.8	17.8	9.1	17.2	295	22.7	8.8	14.2	13.9	-25.0	-9.1
6. 25-34	273	9.5	24.5	8.1	2.9	285	18.6	15.1	11.6	2.1	-22.8	-4.3
7. 10-24	309	13.9	3.6	22.7	*	360	18.6	4.4	25.6	*	-27.6	-3.1
8. Under 10	58	27.6	*	29.7	*	49	22.3	*	26.5	*	-8.6	-2.8
		B. Self-Employed Fathers					B. Self-Employed Fathers					
1. 80-	12	*	8.3	*	0	11	*	0	*	9.1	-0.8	-9.1
2. 70-79	41	0	46.3	*	29.3	14	7.1	0	*	21.4	-61.3	-7.9
3. 60-69	86	0	22.1	1.2	31.4	82	23.2	17.1	0	12.2	-46.2	-18.0
4. 50-59	129	10.9	42.6	0.8	20.2	111	17.1	24.3	6.3	22.5	-27.5	-3.2
5. 35-49	200	13.5	14.5	3.5	19.0	302	18.2	32.5	8.9	7.6	-5.5	-18.8
6. 25-34	439	22.3	25.1	5.5	0.2	286	10.1	10.5	7.3	0	-4.4	-2.0
7. 10-24	206	14.6	2.4	14.1	*	298	36.9	0.3	14.8	*	-25.1	-0.7
8. Under 10	4	25.0	*	0	*	13	38.5	*	38.5	*	-13.5	*

* No possibility for entries in these cells

percentages of Table 8A show . However, for the self-employed there is a marked difference in percentages of fathers and sons reporting type 5 (technical and manual activities) and type 4 (administrative, business, and clerical workers). This means that sons of the self-employed emphasized the business or managerial side of their father's work, whereas the self-employed fathers themselves emphasized the technical and manual aspect. This brings us to a series of problems concerning the factors associated with these patterns of response deviation.

IV. Some Factors Associated with Response Deviations in Reporting Father's Occupation and Education

The disagreements in coded responses of fathers and their sons may be attributed to four main sources. (1) Sometimes there is inadequate detail in the responses; as an extreme example, the designation "retail proprietor" covers both a peddler and a wealthy merchant. Despite care in designing the schedules and manifest care by the respondents, there were cases of inadequate specification of work. (2) There are also inherent ambiguities in identifying some occupations: Where is the line between self-employed artisan and a retailer or between that artisan and a skilled technician? These shade over into ambiguities of status level also, as in distinctions between managers and higher-clerical workers. Such ambiguities were reflected in deviations for proportions of fathers assigned to occupations of types 5 and 4. (3) There may be deliberate or semi-conscious biases that reflect attitudes toward schooling or toward certain occupations. Sometimes such bias goes along with inadequate specification of the nature of an occupation. Turning back to schedules where father and son responses were most inexplicably deviant, it was sometimes possible to identify this sort of bias. For example, a father described himself as "working at a local government office" whereas the son said he was a truckdriver. Both replies could be straightforward, but they carry quite different connotations. One cannot go back to the questionnaires in every instance of discrepancy, but the computer can give us clues about the extent and nature of some biases. For example, are students from humble backgrounds more likely to upgrade their father's schooling or occupation when the overall composition of the child's classroom is relatively high? (4) When a student has insufficient knowledge about his father's work or schooling he may make inferences from other facts he does know. This strain to consistency will exaggerate the correlation between reported occupation and educational attainment, and it could aggravate deliberate biases in reporting also. For example, a well-educated father in a low-prestige job might be more inclined to exalt his position than would the workmate with little schooling. Or a man who has attained a job in which he associates with men who are better educated might exaggerate his education. While analysis of those discrepancies is of interest in assessing reliability and validity of respondents' statements, it may in fact be of more value in providing clues concerning substantive aspects of socio-economic attitudes and their determinants.

In pursuit of some of these questions we will consider first some interrelationships between father and student reports. We will then consider how and to what extent deviations of sons' from fathers' responses may be associated with (a) the social-class composition of the student's school or classroom, (b) the type of curriculum in which he is enrolled, and (c) where he ranks himself in his class.

Table 10 shows the percentage of agreement of sons' with fathers' ratings of education level in relation to fathers' reports of their occupational status and educational attainment. Though the closest agreements are in the low occupation/low education and the high occupation/high education cells, the strain to consistency, if any, seems weak. If we look at agreement or deviation on occupational status, however (Table 11), a much stronger tendency to align occupation with schooling is manifested. When fathers claim high occupational status (levels 1, 2, and 3) the proportion of agreements on status level is positively associated with fathers' education level, whether we take education as reported by fathers or, especially, sons. Where fathers report occupational status as 6, 7 or 8 the proportion of sons concurring is negatively associated with father's schooling.

Agreements in responses on occupational "type," (and probably the degree of accuracy in reporting) is higher the higher the education level reported by father. As we move up the steps of schooling from elementary to university, percentages of agreement between sons and fathers for detailed type of occupation were 56, 61, 62, 72 (overall 59).

We hypothesized that students' responses would be influenced by educational and occupational composition among fathers for each school. If class environment exercises an effect, the responses of students from lower social-class backgrounds should deviate upward from their fathers' reports in those schools having a large proportion of students with higher social-class origins. The reverse might occur with students of high status

Table 10 Percentage of Students Agreeing with Father's Report of His Education by Father's Education and Occupational Status.

Father's Education as Reported by Father	Occupational Status as Reported by Father							
	1	2	3	4	5	6	7	8
Elementary	(100)	59	86	89	87	93	91	92
Secondary	(67)	79	78	78	76	78	74	71
Junior College or equivalent	(36)	64	53	73	(71)	(67)	(33)	(50)
University	87	95	94	82	(50)	--	--	--

( ) Frequency less than 10

Table 11: Percentage of Students Agreeing with Father's Report of His Occupational Status by Father's Education.

Father's Occupational Status as Reported by Father	Father's Education as Reported by Fathers				Father's Education as Reported by Students			
	1	2	3	4	1	2	3	4
1-2	75	77	81	85	63	71	86	86
3	69	87	91	100	59	88	89	95
4	82	86	80	86	77	87	89	77
5	75	68	(67)	*	77	74	78	(67)
6	93	80	(50)	--	94	86	63	(100)
7-8	82	73	*	--	84	70	79	*

( ) Frequency less than 10
* Frequency less than 5

in schools with few such parents. In order to describe the social-class environment of schools, we use one index for educational and two indexes for occupational composition. For the former we computed for each school the proportion of fathers with schooling to level 3 (higher secondary or junior college) and above. Our occupation indexes were (1) proportion of fathers in technical and skilled-manual occupations and (2) proportions in white-collar employment (professional, managerial and high clerical, except engineers). Generally the effects of status composition of the student body on deviations of students' from fathers' responses are striking (Tables 12-14).

The effects seem to be least (although as postulated) for agreement on father's education level in relation to proportion of students having fathers in white-collar employment, yet even here the relationship is unmistakable at the lowest and highest education levels (see Table 12). We have already noted that agreement with respect to education seemed to be less affected by strains to consistency with occupational status than vice versa.

The effects of high and low proportions of well-educated fathers on tendencies of students respectively to upgrade or downgrade father's occupational status are clear cut (Table 13). Thus when fathers rate themselves at occupational status 1-2 or 3, students in classrooms with relatively large proportions of well-educated parents tend to agree (56 and 61 percent agreement), whereas sons in schools where there are few highly educated parents are less inclined to agree that fathers have high occupational status (35 and 45 percent agreement). At the other extreme, we find more agreement with fathers rating themselves in status levels 6 or 7-8 in the schools in which

Table 12 Proportion of Students Agreeing with Father's Report of His Education by Father's Education and Proportion of the Student Body Whose Fathers are White Collar*

Fathers' Education Level as Reported by Fathers	Percentages of Student Body Whose Fathers were White Collar		
	0-19	20-29	30 and over
Elementary	90.8	83.2	84.3
Secondary	78.6	75.6	73.9
"Higher"	60.3	66.7	52.3
University	80.0	88.9	97.0

*Government administrators and officials; professionals excluding engineers; managers, administrators and proprietors in finance and wholesale trade and big retail merchants; high level clerks and accountants in finance.

Table 13. Percentage of Students Agreeing with Father's Report of His Occupational Status by Status Level and Proportions of the Student Body whose Fathers are Highly Educated

Father's Occupational Status as Reported by Fathers	Percentage of Fathers who had Completed Junior College Level or Above		
	0-14	15-24	25 and over
1-2	35	47	56
3	45	60	61
4	48	38	40
5	43	43	54
6	52	46	34
7-8	66	75	55

few parents are highly educated than in schools with relatively many well-educated parents. The effect seems to be of roughly similar magnitude whether up-grading or down-grading is involved.

Table 14 shows the effects of proportions of fathers in white-collar and in technical and skilled-manual jobs on the proportions of sons who agree when their fathers describe themselves as in construction or processing jobs (Group 5). The proportion of students who agreed with fathers who so described their occupations was 84 percent in schools in which students of white collar origins were below 10 percent, but only 68 percent agreed in schools in which sons of white-collar origins numbered 20 percent or more. Contrariwise, the proportion of sons agreeing when the father describes himself as in a technical occupation rises as the percentage of such fathers in the son's classroom increases. This table could be interpreted to mean that students in a white-collar milieu tend to hide the fact that they are sons of manual workers, or that those in a skilled blue-collar milieu had more comprehension of (as well as respect for) technical and manual occupations, or both.

This interpretation of Table 14 might be challenged, however, because the occupational composition of a school is itself based on student reports; part at least of the observed relationships may be spurious. An independent check is available in an analysis by the types of streams in which students are enrolled. For each type of son's curriculum, we have the number of fathers who reported themselves in Group 5. The percentage of sons who agreed with

Table 14 Percentage of Students Agreeing with Fathers who Report themselves in Occupation Type 5[a] by Proportions of the Student Body whose Fathers were in Designated Occupational Categories.

	Percentages of Student Body whose Fathers were:					
	Technicians and Skilled Manual Workers[b]			White Collar[c]		
	0-9	10-19	20 and over	0-9	10-19	20 and over
Number of Fathers reporting themselves in Occupation Type 5	402	378	271	134	718	199
Proportion of Students agreeing with Fathers who report themselves in Occupation Type 5	71.9	79.1	82.3	83.6	78.4	68.3

[a] Type 5 includes engineering and processing jobs at all status levels (see page 8).

[b] Engineers and Skilled Technicians.

[c] Government administrators and officials, professionals excluding engineers; managers and proprietors in finance and wholesale trade and big retail merchants; high-level clerks and accountants.

the father's assignment of himself to Group 5 was lowest in the general curriculum (68 percent) and largest in the technical curriculum (81 percent); it was 74 percent in the commercial and 78 percent in the agricultural curriculum. However, there was no systematic curriculum effect on tendencies for students to up- or down-grade their fathers with respect to reported educational attainment or occupational status.

Students' assessments of how well they ranked in school achievement relative to other members of their class had no observable effect on the deviations between fathers' and students' reports of father's education, his occupational status, or his type of occupation. Even at the upper and lower extremes in pupil achievement, the proportions agreeing on the parental education and occupation were essentially the same, and among those who disagreed there was no systematic tendency toward up- or down-grading nor particular substitutions of occupational types.

Conclusions

The findings reported in this paper have both methodological and substantive bearing. The overall agreement between reports of fathers and sons is only a minor part of the analysis, and it can be summarized briefly before commenting on other points.

Agreement on father's level of education was 85 percent where he was a wage and salary worker and 87 percent where he was self-employed. Using an eight-step occupational-status scale, agreement within one step was 81 and 85 percent respectively. For seven major "types" of occupation, agreement ran at about 80 percent. The most extreme deviations with respect to occupational status occurred among self-employed fathers, reflecting difficulty in identifying the size of proprietorships and the scope of responsibility among independent businessmen; on these points sons had less information. There was one systematic deviation of students' from fathers' reports on type of occupation: 1051 fathers reported themselves to be technicians or manual workers in processing activities (group 5) but 18 percent of their sons assigned them to administrative business or clerical jobs. On the other hand, only 983 sons reported their fathers to be working in technical or porcessing activities; 13 percent of these fathers described themselves as white-collar. This distortion was minimized among students enrolled in technical and other schools having a large representation of pupils from skilled-manual homes. Whatever attitudes may or may not be involved in this, it is evident that where student familiarity about technical and manual occupations is greatest, a closer agreement with fathers' reports of such activities can be expected.

A Swedish study of fathers' and sons' reports of father's schooling provided data allowing us to make a cross-cultural comparison of reporting of parental education. As compared with random error, the reports of Japanese students tended to deviate upward from those of their fathers, whereas in the Swedish data the biases were in the other direction. In part the Japanese pattern reflects changes in the school system after the War: Presumably some pupils interpreted the old system in terms of what they know about the present one. Since a large number of old "higher schools" or professional colleges" (koto-senmon-gakko) were upgraded and absorbed into the present university system, students were more likely to report "university" when their fathers actually graduated only from a "higher school" in the lower-college part of the old system. However, this is not a sufficient explanation of the Japanese-Swedish contrast, since Japanese students were more inclined than Swedish ones to up-grade fathers who reported only elementary schooling.

Is a Japanese father more likely to present to his son an image of a man with somewhat more schooling than he has actually received? There are some reasons for believing that among fathers of senior secondary school students this may be the case. There is an exceptionally high involvement of parents in Japanese school affairs all through the elementary years; parents certainly try to present as educated a "face" as they can under these circumstances, and traditionally education has had a high place in the value system. However, we have no direct support for this surmise as to why Japanese pupils up-grade the schooling of elementary school fathers.

The foregoing interpretation is consistent with the opposite tendency in discrepancies between fathers and sons in reports about paternal occupational status. Sons tended to give lower occupational status reports than did the fathers. However, there may have been a greater tendency among low-status fathers of secondary pupils to shade their statements favorably. The fact that students may have had less information cannot explain the fact that the proportion of fathers' reports coded in status levels 7 and 8 was somewhat smaller than that of sons' responses at those levels (19 and 24 percent respectively).

Effects of classroom milieu on students' response biases in reporting paternal occupational status were clear cut. Japanese students of lower social origins tended to deviate upward from their father's reports on status in those schools where a large number of parents were highly educated. Students of higher social origins tended equally to deviate downward from fathers' reports of occupation when they were enrolled in schools with few highly-educated parents. There was little evidence of such effects for deviation of students' from fathers' reports of parental schooling.

It is quite possible that something like the classroom-milieu effect operates at work and that men in jobs above what is usually perceived as coordinate with their schooling may overstate the latter or that men who are well-schooled but not occupationally successful avoid confessing the latter (even to themselves). However, although our data provide no evidence on this, they do show a clear strain to consistency in sons' reports of fathers' occupational status and education. Thus, when poorly-schooled fathers (according to either their own or their sons' response) indicated occupations of high status, sons reported a lower status. And when well-educated fathers indicated a humble occupational status, sons gave higher status descriptions. These processes operated systematically within the sons' over-all patterns of deviation from fathers' reports on schooling and occupational status.

These findings suggest the need for more intensive explorations and more cautious interpretations of correlations between schooling and occupation as reported in survey (including census) data. The findings suggest also that the effects of classroom and other milieus on perceptions and reports of fathers occupational status deserve more attention as a substantive question.

QUESTIONS USED IN CODING FATHER'S OCCUPATION

On questionnaire for employee fathers:

A. What kind of job are you in at present? (If you have no job at present, write about your former job.) Write in this way. For example, worker on an assembly line in an automobile factory; truck driver; assistant to a truck driver; telephone switchboard operator; teacher in a primary school; civil engineer, etc.

B. Where are you working? Answer in this way. For example, municipal government office national ministry of railway; private railway; textile factory; shipyard; private high school; coffee shop; restaurant in a hotel, etc. If you have no job at present, write where you worked formerly.

C. How many employees are there in your company? Answer the number including those who are working in branch units, if any. If you are not working at present, answer about your former place. If you are working in a government office, agency, or organization, circle 1.

1 Not working in a private firm
2 In a firm with less than 5 employees
3 5-9 employees
4 10-29 employees
5 30-99 employees
6 100-499 employees
7 500 or more employees

D. Do you have any specific position at present?

1 Bu-kyokucho and above
2 kacho or kakarisho
3 shokucho or hancho
4 Other (Specify ____________________)

On questionnaire for self-employed fathers:

A. In which of the following groups does your occupation best fit? Circle the nearest one and write in just what your occupation is.

1 Professional (physician, writer, photographer, etc. __________
2 Craftsman (carpenter, tatami mat maker, etc. __________
3 Food manufacturing ______________________________
4 Manufacturing other than food ______________________

5 Repair services (radio repair, bicycle repair, etc. ____________
6 Wholesaler or commodity broker, etc. ________________________
7 Retailer ____
8 Service such as restaurants, lodging, barber, etc. ____________
9 Real estate, finance (pawn-shop, house rental, etc. ____________
10 Others (construction contractor, private taxi operator, etc. _____

B. How many employees are there other than your family members in your enterprise?

1 none
2 1-4
3 5-9
4 10-19
5 30-99
6 100 or more

On questionnaires for students:

Here are three questions concerning your father's occupation. If your father is dead or retired, give your father's previous occupation.

A. What is your father's principal occupation? If he has a regular 'status position', state it as exactly as possible. For example, farm operator; night watchman; foreman in a factory; section chief in administration; teacher in a primary school; civil engineer; skipper of a deep-sea fishing boat, etc.

B. Where does your father engage in that job? Describe as exactly as possible. For example, municipal office, Department of Labor, National Railway, textile factory, shipyard, private school, restaurant of a hotel, etc.

C. For what category of employer does he work?

1 Government agency
2 Private corporation
3 Farmer
4 In his own or family firm (no other employee than family)
5 In his own or family firm (1-9 employees other than family)
6 In his own or family firm (10 or more employees other than family)
7 Other (Specify ____________________________)

FOOTNOTES

1 This information was obtained in the carrying out of a multifaceted research endeavor in Japan (using both published documents and special survey materials) oriented to analysis of relations among schooling, on-the-job training, and career patterns as these are conditioned by and shift with labor market structures and processes.

2 The method of coding status is explained in Section II below. We made separate comparisons of father and son responses for fathers who were self-employed and those in wage and salary employment.

3 Obviously in this as in any other study, there can be and are occasional errors in card punching, and random errors made by respondents in circling the wrong answer; these are few, however.

4 It is likely that some students were unfamiliar with the educational system at the time their fathers attended school. In the last twenty years many changes have occurred in the Japanese educational system. First, according to the recommendations of the U. S. Education Mission, the Japanese pre-war 'multi-track' system was transformed into the present 6-3-3-4 'single-track' system. Second, the university system is much different today than it was before World War II. The number of national universities have been dramatically extended by incorporating the old higher schools or professional schools (koto-senmon-gakko) into the new universities. Therefore, some students reported university when their fathers actually graduated from higher school or professional school.

5 K. Johannesson, "Arbetsrapport från undersökningen av rekryteringen till högre studier." (mimeo, n. d.)

6 For more detail see Ibid.

7 Fortunately, there is considerable evidence that Japanese are exceptional in the reliability with which they respond on such forms. The plans for self-administration in the 1970 U. S. census would give less cause for concern were this planned for Japan.

8 See Otis Dudley Duncan, "A Socioeconomic Index for All Occupations" and "Properties and Characteristics of the Socioeconomic Index," Chapters VI and VII in Albert J. Reiss, Jr., et. al., Occupations and Social Status, New York, Glencoe Free Press, 1961.

9 Research Committee, Japan Sociological Society, Nihon Shakai no Kaiso-teki Kozo (The Class Structure of Japanese Society), 1958

10 There are a few occupations that are distinctively Japanese, such as acupuncturist or tatami-mat maker, that are not listed on non-Japanese standard classifications though they appear in the detailed statistical tables for Japan. Numbers in these occupations were few. Nevertheless, in order to fit them into status codes we made out cards for these, along with a selection of occupations from the Duncan list, and gave them to five independent judges who were asked to group the cards into status levels in eight piles. The judges agreed within one step in the classification of all the added distinctively Japanese occupations. (Farmers, priests, and "engineers" were not included in this trial).

11 Evidently there can be no upward deviation from a status rank of 1 and no 2-step upward deviation from a rank of 2; downward deviations from ranks 8 and 7 are constrained similarly. On the other hand, the extent and directions of deviations within these constraints could vary substantially in the four sect~~ors~~ions of the table.

APPENDIX D

SUPPLEMENTARY ANALYSIS OF COURSE SELECTIVITY AND PREFERENCES AMONG THE HIDEO IKEDA SAMPLE OF MALE UPPER-SECONDARY STUDENTS, 1966

The extent to which parental backgrounds conditioned the types of upper-secondary courses in which students were enrolled was examined in Chapter III. That chapter presented also a summary analysis of relationships between students' type of course, on the one hand, and their initial and subsequent course preferences and course options for which they had taken examinations at entry to upper secondary school. The purpose of this appendix is to carry the latter analysis somewhat further. First we will look at hierarchies and at inter-course relationships in preferences as revealed by examination patterns at entry and by senior-year "hindsight" preferences in relation to the courses in which respondents were actually enrolled. We will then examine stability and shifts in preferences from examination and entry to graduation. Finally, we will look into senior-year "hindsight" preferences in relation to the reasons expressed for those preferences, their relation to college aspirations, and the reasons why dissatisfied students were enrolled in other than the curricula that, as seniors, they preferred.

Preference Patterns and Realization

How far students had entered the upper-secondary courses and schools they had preferred at the time of graduation from lower secondary school is summarized, as reported by our respondents, in Table D-1. Although this table repeats some findings already presented in Chapter III, it is needed here to orient the rest of the discussion. Among all except "General-A" students, roughly 45 per cent had entered both the course and the school they initially preferred (row 1 of the table). Roughly half of the students in most course types were in the schools they preferred (row 1 plus row 3); the exception was technical-course students, three fifths of whom were in the school they preferred. The important contrast between General-B and all other groups is their broad satisfaction with course type, but the large minority in a non-preferred school nevertheless. The significance of this contrast was discussed in Chapter III.

Many students had accepted the second or third best alternative without any active attempt to enter the course or school preferred initially. But other youth had taken examinations for entry to other courses and/or schools. Table D-2 distributes students according to course preference and course examination behavior; the first row of the table is simply the sum of rows 1 and 2 of Table D-1. The proportions of those in their initially preferred course-type who had nevertheless taken examinations also for entry to some other type of course

TABLE D-1. --Rates of Realization of Initial School and Course Preferences by Type of Course in Which Enrolled

Realization of Initial Preferences	Type of Course in Which Enrolled				
	General B	General A	Agriculture	Commerce	Technical
1. Preferred course and preferred school	45	37	46	44	47
2. Preferred course; not preferred school	36	17	11	6	11
3. Preferred school; not preferred course	4	8	8	9	13
4. Neither preferred course nor school	15	38	35	42	29
Total: per cent	100	100	100	100	100
N (Sample)	1740	432	1132	971	2444

TABLE D-2. --Proportions Taking Other Entrance Examinations by Course in Which Enrolled; Students in and Not in Preferred Type of Course

	Type of Course in Which Enrolled				
	General B	General A	Agriculture	Commerce	Technical
1. Percentage in initially preferred course	81	54	57	49	59
2. Percentage of those in preferred course who took examination for another course or school	9	7	15	17	31
3. Percentage of those not in preferred course who took examination for another course or school	19	14	22	35	37

(row 2) are higher the more specialized the curriculum to which the student aspired and in which he is enrolled, ranging from under ten per cent in the general courses to a third of those in the technical curricula. The proportions of students enrolled in other than their initially preferred curricula who had taken examinations for some other course (row 3) was again relatively low among general-course students, 14 per cent among the General-A students to well over a third in the commerce as well as the technical schools. It is evident, nevertheless, that the vast majority of students who initially preferred courses other than those they entered gave up the preferred option for one reason or another without even attempting examinations. (It must be remembered also that these data refer to initially preferred options and their realization as remembered by respondents now approaching completion of their upper-secondary courses three years later.)

The patterning of preferences among types of upper-secondary curricula is revealed both in the proportions within each course type who realized their preferences and in the alternative specific courses for which examinations were taken at entry to upper-secondary school (Table D-3).

Among the few general-course students who took other examinations, a preference for technical curricula is evidenced clearly. Moreover, the "academic" general-course students (B) aimed highest; over three-fifths of those taking examinations for other courses sought

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TABLE D-3. --Types of Course Alternatives for Which Entrance Examinations were Taken by Course in Which Enrolled

	Type of Course in Which Enrolled				
	General B	General A	Agri-culture	Com-merce	Tech-nical
Proportions taking other examinations	10	9	19	27	33
Percentage of all students with other preferences but no examinations taken for other courses	15	40	34	33	26
Distribution of other examinations by course type[a]					
General	--	--	30	71	46
Tech. Jr. College	63	44	7	9	43
Technical secondary	27	32	44	19	--
Commercial	4	14	16	--	8
Agricultural	--	2	--	--	--
Other	6	8	3	1	3
Total	100	100	100	100	100

[a] Exclusive of examinations for the same type of course but another school.

entry to a technical junior college. These technical junior colleges rated high also in the initial ambitions of General-A and of technical secondary students. Few students in agricultural courses had actively sought admission to technical junior colleges, though almost half (44 per cent) of those actively looking elsewhere had sought entry to technical upper-secondary schools. The actively preferred option among commerce students was overwhelmingly for the general courses, but commerce rated lower as a goal than any alternative except agriculture among students enrolled in other curricula.

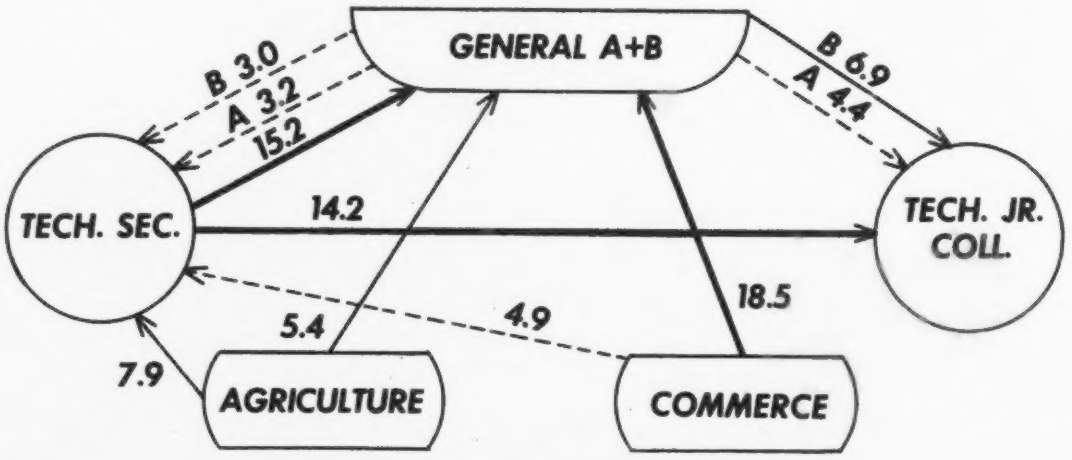
By senior year, the upper-secondary students of course possess a fuller awareness both of some aspects of career outlooks and of implications of having studied in one rather than in another upper-secondary school. Some pupils have shifted their preferences over the three years of their upper-secondary schooling, whether in favor of or away from the course in which they have been enrolled. Preferences expressed by seniors with respect to what they now wish they had done (which we will term "hindsight preferences") are summarized in Table D-4, and initial and senior-year directions of preference across types of courses are displayed as sociograms in Figure D-1. The upper section of that figure refers to proportions of

TABLE D-4. --Percentage Distributions of Hindsight Preferences by Type of Course in Which Enrolled Now

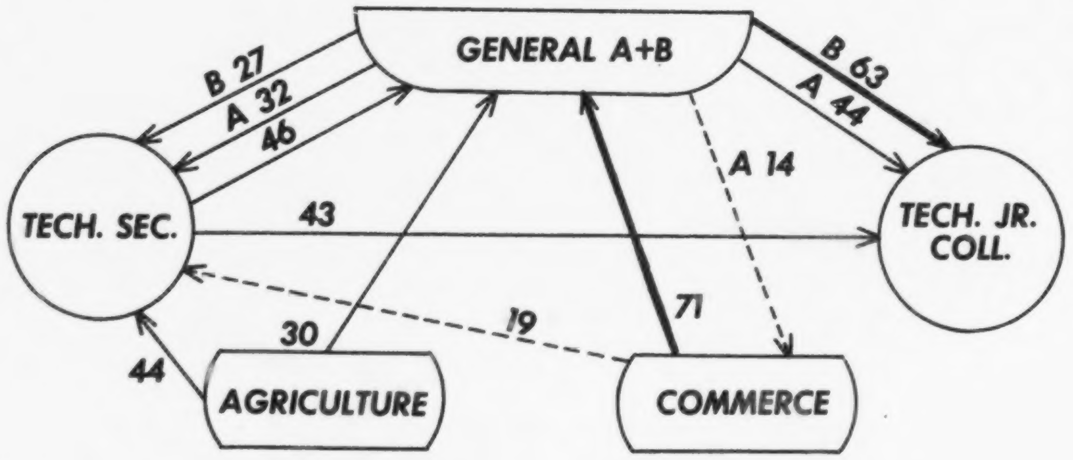
Hindsight Preference	Type of Course in Which Enrolled				
	General B	General A	Agriculture	Commerce	Technical
General	77	38	14	27	32
Agriculture	1	2	45	1	2
Commerce	3	14	8	46	5
Technical secondary	8	25	19	11	44
Tech. Junior College	7	16	10	9	14
Other	4	5	4	6	3
Total	100	100	100	100	100

Inter-Course Associations in Preference Patterns

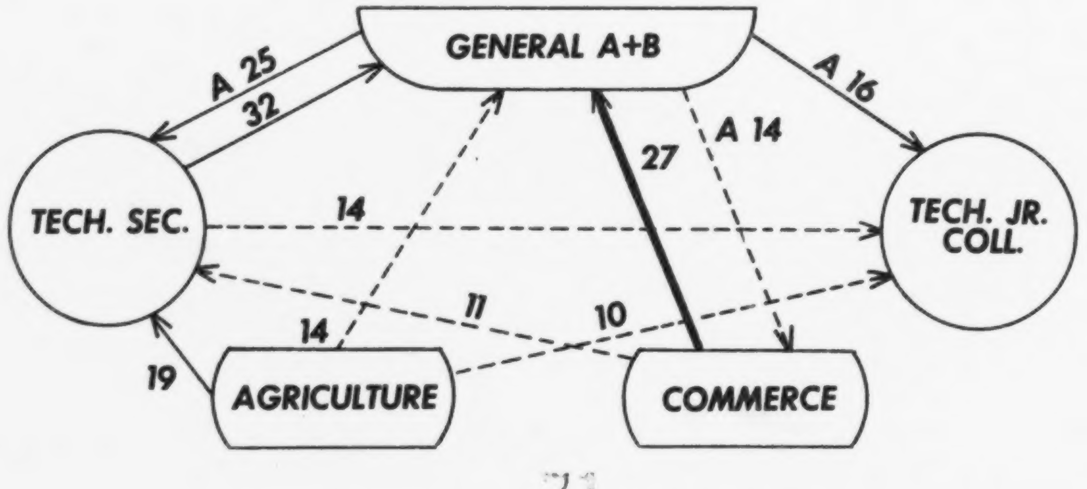
PART I - PERCENTAGE OF ENROLEES IN EACH TYPE OF COURSE WHO TOOK EXAMINATIONS FOR EACH OTHER TYPE OF COURSE (Percentages under 3.0 excluded).


GENERAL A+B
B 3.0
A 3.2
15.2
B 6.9
A 4.4
TECH. SEC.
14.2
TECH. JR. COLL.
18.5
5.4
4.9
7.9
AGRICULTURE
COMMERCE

PART II - PERCENTAGES TAKING EXAMINATIONS FOR DESIGNATED ALTERNATIVE COURSES AMONG ALL IN A COURSE TAKING EXAMINATION FOR ALTERNATIVE COURSES (Percentages under 10 excluded).


GENERAL A+B
B 27
A 32
46
B 63
A 44
A 14
TECH. SEC.
43
TECH. JR. COLL.
71
30
19
44
AGRICULTURE
COMMERCE

PART III - PROPORTIONS OF SENIORS IN EACH COURSE WITH "HINDSIGHT" PREFERENCES FOR DESIGNATED OTHER COURSES (Percentages under 10 excluded).


GENERAL A+B
A 25
32
A 16
A 14
27
TECH. SEC.
14
TECH. JR. COLL.
11
10
14
19
AGRICULTURE
COMMERCE

all students enrolled in a course (origins of the arrows) who had taken an examination for each other type of course (destinations of the arrows). Only linkages involving 3 per cent or more of the students enrolled in a course are included in the diagram. The pattern in this first diagram is strongly characterized by the fact that proportions of students in the general curricula who reported taking examinations for any other course were very low, whereas proportions of those enrolled in technical secondary courses who had taken examinations also for general courses or for technical junior college were substantial. The middle and lower diagrams (from Tables D-3 and D-4 respectively) show much more clearly the two-way preference between technical and general courses. Also, in the last diagram (from Table D-4), the general drawing power of the technical secondary institutions as perceived by youth reaching the end of their upper-secondary schooling is conspicuous. On the other hand, whereas three-fourths of the technical students had initially preferred a technical course,either in the upper-secondary school or in a junior college, by the time they were seniors in the technical secondary schools the combined figure for these youth had dropped to 58 per cent.

The fringe position of the agricultural schools is obvious in all three diagrams; students enrolled in other courses who reported initial or senior-year preferences for agricultural curricula were rare. This is hardly surprising, since youth initially wishing to attend agricultural schools typically can do so if they enter upper-secondary schools at all; other blockages aside, it is extremely unlikely that youth wanting agricultural schooling will find their preferences running counter to those of parents or teachers. Nor are students who in fact enter the agricultural schools any less (or more) often satisfied than those enrolled in other courses, setting the academic-general students aside. There is a distinctive limitation faced by rural students, nevertheless, in the comparative lack of locally available technical-school options along with the difficulties of rural youth in qualifying for places in technical schools. This limitation on viable options among rural youth is reflected in Table D-4 in the unrealized preferences for technical courses among seniors in the general-A and to a lesser extent in the agricultural courses. Agriculture students displayed remarkably little interest in general curricula.

Stability, Focused Adjustment, and Instability in Course Preferences

In order to analyze stability and shifts in course preference patterns, we will here make use of a notation that consists of three symbols and three digit locations. The symbols are as follows:

S = Type of course initially preferred

Z = Type of course preferred by "hindsight" where $Z \neq S$.

W = Type of course other than either S or Z. Thus $W \neq S$, and $W \neq Z$.

The digit locations are as follows:

Place 1 = Type of course for which entrance examination was taken. Where examination was taken only for the course in which the student enrolled, symbols entered in places 1 and 2 will be the same. Where an examination was taken for another course, the symbol for that course is entered in place 1.

Place 2 = Course in which enrolled.

Place 3 = Course preferred by hindsight. This can be either Z or S, but it cannot be W. The entry will be S when the course initially preferred and that preferred by hindsight are the same.

The various possible combinations in the notation just described may be grouped in three sets, each of which has sub-categories.

Set A. Stable Preference Patterns

(1) Success-Constant SSS, WSS

These students enrolled in the course they preferred from the start and they have not changed their preferences. The only variation is that some of them (designated WSS) took secondary-school entry examinations not only for their preferred course but for another course as well; the latter were very few.

(2) Blocked-Persistent SWS, WWS

These students enrolled in other than the preferred course but have not altered their preference. Some of them (SWS) tried examinations for the initially preferred course; others (WWS) apparently considered their first choice as unavailable to them in any case (for whatever reason), and hence did not take examinations for the preferred curriculum.

Set B. Focused Alternative

(3) Adaptive Success

(a) ZZZ Entered course other than initial first choice but now prefer it (first choice by hindsight). Took no other examination.

(b) SZZ, WZZ Similar to ZZZ, but took an examination for another course.

(4) Success-Shift, Focused

(a) ZSZ Entered course of initial first choice, but now wish had entered other course for which had taken examination originally.

(b) SSZ Took examination for initially preferred course only and entered that course, but preference has since changed.

Set C. Unstable Preferences

(5) Success-Shift, wandering WSZ

Entered initially preferred course; preference has change; took examination for yet another course.

(6) Non-success-Shift WWZ, SWZ, ZWZ

Enrolled in course that differs from both initially and presently preferred, and preference has shifted.

The distributions of students among these patterns are shown in Table D-5. As we should expect, the proportions who have been both successful and consistent in their preferences are highest for General-B, though even these do not quite reach 70 per cent of the total. By contrast, the most unstable and wandering in their preferences are students enrolled in commercial schools (42 per cent) followed by those in the General-A and the agricultural curricula. The General-A students are notable for the proportions who followed their initial preferences but who now, as seniors, wish they had taken a different path; almost a fourth of the General-A students are in the category SSZ (i.e., B.4.b. in Table D-5). What implications this might have either for guidance or for policies on curriculum is not at all clear, however. Indeed, when we add together the categories SSZ, ZSZ, and WSZ, we see that the proportions of "Success-Shift" cases are as high for the technical as for the General-A students; these figures, which can be estimated from Table D-5, are given directly in the last row of Table D-6.

Of special interest are the directions of shift in preferences displayed among those who enrolled in the type of course they initially preferred, but who have changed their perceptions of preferred alternatives during their upper-secondary years. The patterns (Table D-6)

TABLE D-5. --Percentage Distributions of Preference Patterns

	Type of Course in Which Enroled				
	General B	General A	Agri-culture	Com-merce	Tech-nical
A. Stable Preference Patterns					
(1) Success-constant SSS, WSS	68.4	28.9	36.8	24.8	33.3
(2) Failed-persistent SWS, WWS	1.4	2.3	3.4	5.3	6.3
Total Stable	69.8	31.2	40.2	30.1	39.6
B. Focused Alternative					
(3) Adaptive Success					
(a) ZZZ	6.5	6.9	6.1	13.8	8.6
(b) SZZ, WZZ	0.9	2.2	1.2	3.3	2.8
(4) Success-Shift, focused					
(a) ZSZ	0.7	0.4	1.5	0.8	4.3
(b) SSZ	11.4	23.9	16.3	10.0	16.6
Total Focused Alternative	19.5	33.4	25.1	27.9	32.3
C. Unstable					
(5) Success-Shift, wandering					
(c) WSZ	1.2	0.6	2.4	0.5	4.1
(6) Failed-shift, WWZ, SWZ, ZWZ	9.5	34.8	32.3	41.5	24.0
Total Unstable	10.7	35.4	34.7	42.0	28.1
Total	100.0	100.0	100.0	100.0	100.0

TABLE D-6.--Analysis of Preference Shifts: Percentage Distributions of Hindsight Preferences by Course in Which Enroled for Students in Categories SSZ, ZSZ, and WSZ

Hindsight Preference	Type of Course in Which Enroled (= S)				
	General B	General A	Agri-cultural	Com-merce	Tech-nical
General B	--	0.8	27.1	40.9	46.9
General A	3.6	--			
Agriculture	3.6	3.3	--	3.8	3.3
Commerce	14.9	20.9	14.1	--	9.5
Technical secondary	32.5	38.7	37.9	25.0	--
Technical Junior College	27.3	29.8	15.8	19.7	36.5
Other	18.1	6.5	5.1	10.6	3.8
Total	100.0	100.0	100.0	100.0	100.0
Percentage of total students who are SSZ, ZSZ, WSZ	13.3	24.9	20.2	11.3	25.0

repeat essentially the linkages and directions of preference delineated earlier in comparing course initially preferred with that in which enrolled. General course students (B or A) shift their preferences mainly in favor of technical secondary schools and technical junior colleges, though with somewhat less emphasis on the latter. Commerce students shift most often toward the general schools, but taking technical secondary schools and technical junior colleges together, shifts of commerce students in favor of technical education exceed those toward the general courses. The technical secondary students who shifted preferences in the course of their studies movedfirst toward General B, but then in significant proportions to the technical junior colleges; this is much like the technical-school pattern in Table D-3. A very few from each curriculum now look with more favor on the agricultural course, but the biggest difference between the linkages displayed in Tables D-6 and D-3 is the shift in favor of technical education among the commerce students, already mentioned. Generally, what is most remarkable is the close resemblance between the preference patterns revealed in Tables D-3 and D-6 despite the fact that they refer to mutually exclusive sub-populations[1] as well as to a different sort of inter-course comparison.

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[1] None of the Table D-3 cases can be S in the second place in our notation; all of the Table D-6 cases are necessarily S in the second digit.

Some Interpretations of Choices and Preferences

Seniors expressing preferences for courses other than those they had already studied were asked further questions both about why they were enrolled in their present courses of study and why they had other preferences. Table D-7 records the "main reason" a student was attending a type of course other than what he would regard as most satisfactory if he could choose again and without constraint. The first row of the table refers explicitly to changes in information and knowledge that have altered perceptions of available alternatives and of their implications. Percentages in this row are of course minimum estimates of the importance of shifts in knowledge and preferences, since other students who gave parental wishes or teachers' preferences, for example, as the primary reason may also have changed their evaluations. Nevertheless, excepting agricultural students, as many as an eighth to a fifth of students who wished they had been enrolled elsewhere specified as the most important reason for the discrepancy between the course taken and hindsight preference their initially inadequate information or lack of more subtle knowledge concerning course options and their implications.

A wide variety of miscellaneous write-in responses aside, the other answers fell in three main clusters: first, failure to perform sufficiently well on examinations for entry to the preferred course (row 2); second, pressures and preferences of teachers and relatives

TABLE D-7. --Percentage Distributions of Reasons Enrolled in Present Course by Type of Course; Senior Students Expressing Preferences for Other Courses

Main Reason Enroled in Present (non-preferred) Course	Type of Course in Which Enroled				
	General B	General A	Agri-culture	Com-merce	Technical
1. Inadequate initial information or knowledge	16	12	7	12	20
2. Failure on examination for preferred course	16	12	12	12	18
3. Teacher influence or pressure	15	23	28	23	20
4. Parental pressure or preference	22	14	34	20	17
5. Less expensive than alternative preferred	4	5	5	5	5
6. Nearer home	11	25	8	7	3
7. Other (miscellaneous write-ins; no main themes)	16	9	6	21	17
Total: %	100	100	100	100	100
N	350	291	534	495	1160

(rows 3 and 4); and third, economic considerations, including nearness to home (rows 5 and 6). Most of the general-course students (either B or A) who took examinations for other preferred courses failed to qualify on those examinations; a comparison of row 2 of Table D-7 with row 3 of Table D-2 shows this clearly. However, the situation was very different in other courses. Only half of the dissatisfied students in agricultural and in technical curricula who had taken examinations for other courses reported failure on those examinations, and among commerce students the corresponding fraction was only a third. The student selection and allocation processes are much more complex than stereotyped statements about the functioning of the examination system might lead us to believe--even after taking account of initial selection for taking examinations in the first place.

The importance of pressure and advice from parents and teachers is clear enough, especially among students who have reluctantly enrolled in agricultural schools (over three-fifths of whom stressed parental and teacher preferences or pressures). In other courses, the proportions emphasizing acquiescence in parental or teacher influences ranged from a third to two-fifths of the dissatisfied or disappointed students.

The proportions reporting economic considerations as paramount were negligible regardless of type of course if we define "economic" narrowly, as referring to direct schooling outlays only (row 5). This reflects the fact that private, direct outlays on schooling are much the same among course types. The most important cost differences, a few special private institutions aside, are associated with geographic location; expenses of commuting or of boarding away from home can prove prohibitive to many rural youth wishing to enrol in a type of secondary education not available locally. It is no accident that students in General-A curricula were by far the most inclined to give nearness of their present school as their reason for attending it, despite contrary preferences. For the opposite reason, we find the lowest proportions on this response among students in the technical secondary schools, which are the least widely accessible geographically.

The reasons for their course preferences given by those students who expressed senior-year preferences for other than the courses they had in fact taken are shown in Table D-8. Common responses in all courses were the personal ones--that another course was better suited to the youth's talents and abilities, or that it would have been "more interesting." General-course and agricultural-course students who wished they had come through other curricula were the most likely to stress preparation for careers or jobs, while commercial and technical students wishing they had taken other courses were the most likely to emphasize ease of access to college or university. This pattern contains no surprises; it is exactly what we might expect given the patterns of cross-course preferences delineated in the immediately preceding pages.

TABLE D-8. --Percentage Distributions of Reasons for Preferring Other Courses by Type of Course in Which Enroled

Reason for Senior-year Preference for Another Course	Type of Course in Which Enroled				
	General B	General A	Agriculture	Commerce	Technical
1. Better suited to my talents or abilities; more interesting	46	35	39	38	36
2. Better preparation for career or job	35	52	45	22	23
3. Better chance for higher education	8	1	6	26	26
4. Other	11	12	10	14	15
Total: %	100	100	100	100	100
N	370	294	548	509	1287

Another and perhaps more interesting perspective on some of these associations is provided by dividing students into the four college-aspiration or attitude categories discussed in Appendix E, and then examining their secondary-school preferences in courses as related to the one in which they were enrolled (Table D-9). The consistent monotonic relationships between college-aspiration or attitude categories and proportions favoring general curricula are repeated from one group to another, but equally remarkable is the looseness of that relationship and the marked preference for the course actually taken even among a minority of youth in "vocational" courses who look forward to full daytime college or university education. The proportion of such vocationally specialized preferences jumps sharply between the day-college group and those who were taking examinations for entry to night courses in colleges and universities, those taking no examinations or not interested in college quite aside. But it is significant at the same time that a third or more of both General-B and General-A students who state explicitly that they have no interest in higher education of any kind nevertheless prefer a general to any other upper-secondary curriculum. The corresponding proportions among students enrolled in other than the general courses are very much lower, ranging from 10 per cent among the agriculture students to 17 per cent among those in the technical secondary courses.

TABLE D-9.--Relationships of College Aspirations to Hindsight Upper-Secondary Course Preferences by Type of Course in Which Enrolled

Senior-year (Hindsight) Course Preferences	College Aspiration-Attitude Categories			
	Day College	Night College	College Interest No Exam.	No Interest in College
	Students Enrolled in General B			
General	80	58	38	35
Technical (incl. T.J.C.)	13	26	39	46
Commercial	2	9	13	14
Agricultural	1	2	3	--
Other	4	5	7	5
Total %	100	100	100	100
N	1612	43	61	63
	Students Enrolled in General A			
General	71	44	36	33
Technical (inc. T.J.C.)	19	56	43	43
Commercial	4	--	11	18
Agricultural	4	--	4	2
Other	2	--	6	4
Total %	100	100	100	100
N	52	18	102	357
	Students in Agricultural Course			
General	42	29	22	10
Technical (incl. T.J.C.)	19	28	28	30
Commercial	6	--	9	8
Agricultural	29	36	36	48
Other	4	7	5	4
Total %	100	100	100	100
N	109	14	197	814
	Students in Commerce Course			
General	57	25	35	13
Technical (incl. T.J.C.)	7	17	25	23
Commercial	29	44	33	58
Agricultural	3	2	1	1
Other	4	12	6	5
Total %	100	100	100	100
N	184	48	248	551

APPENDIX E

College Aspirations and Career Perspectives Among Japanese Senior Secondary Students[*]

HIDEO IKEDA

IT IS COMMONLY ASSUMED that aspirations for post-secondary education reflect occupational expectations or hopes, and investigations of both educational intentions and occupational aspirations have multiplied. Nevertheless, the linkage between these has received little explicit attention. In fact, the relationship between the two kinds of aspirations or plans may be more complex than is often assumed. Furthermore, the educational aspirations themselves have not been carefully delineated. It is the purpose of this paper to explore those relationships in some detail.

The data are taken from questionnaires given in December 1966 to over 7000 Japanese boys enrolled in the last year of senior-secondary school. Only students in the public school system were sampled. The sample of schools was stratified to give disproportionate weight to the various vocational streams. Within each of these types, schools were selected at random in the cities of Tokyo, Osaka, Fukuoka, Hiroshima, and Tokushima. Tokushima is a relatively small city on the Island of Shikoku, with a population approximating 200,000, and Hiroshima has a population of 500,000; Fukuoka, in northern Kyushu, is over 700,000 and Osaka and Tokyo are of course vast metropolises. Rural areas in which samples were taken included parts of Tochigi prefecture (north of Tokyo), of Wakayama prefecture (the peninsula south of Osaka), of Hiroshima prefecture, and of several prefectures on the island of Shikoku. For the purposes of this paper the samples have been reweighted to approximate the all-Japan distribution of students by type of secondary course, although this does not correct for any biases that may arise from the geographical limitations of the samples.

College-aspiration types

To delineate aspirations for post-secondary schooling as the leading variable in this study, the pupils were asked two questions:

1. If possible would you like to continue with full-time schooling after graduating from your present school?
   (a) Yes, if possible
   (b) No, I would not want to continue

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[*] This paper is a byproduct of a larger project on schooling, on-the-job training, and labour market structures in Japan directed by Professor Mary Jean Bowman of the University of Chicago and supported by the United States Office of Education and the Carnegie Foundation. The paper was first read to members of the Comparative Education Society in a meeting at the University of Chicago on 13 February, 1968. Both Professor Bowman and Professor C. Arnold Anderson made many helpful suggestions.

2. Do you plan to take entrance examinations for college next spring?
   (a) Yes, full-time college or university
   (b) Yes, night college
   (c) No

By combining responses to these two questions, educational aspirations could be classified into four categories (plus less than 1 per cent of non-respondents). Those who responded (a) on both questions are called 'day-college' type. Those responding (b) on question 2, irrespective of their response on question 1, are called 'night-college' type. Those checking (a) on question 1 and (c) on question 2 are named 'yes-no' type. And those saying 'no' on both questions were called 'non-college'. Those of the first, day-college, type plan to go to day college or university and those in the second, night-college, type expect to take examinations for entry to night school immediately after they finish secondary school. The 'yes-no' respondents say they would like to continue but do not see this as an immediate possibility (if ever). The 'non-college' individual has little if any interest in continuing and no plan to do so. (The very small non-response group may be neglected). A priori the four types would seem to form an ordered sequence in degree of orientation to college attendance, as indeed they do on a number of related attitudes toward careers and training.

These four types occur in quite different proportions among pupils taking different courses of study in Japanese secondary schools: general, commercial, technical, and agricultural. As shown in Table 1, in each type of curriculum except the general, most of the pupils were of the 'non-college' type, with 53 per cent among commercial pupils, 52 per cent among technical boys, and 71 per cent among agricultural pupils. On the other hand, over two-thirds of pupils (72 per cent) in the general courses were 'day-college' type. In fact, 85 per cent of the boys of the day-college aspiration type are to be found in the general courses. Boys in the agricultural streams are the most definitely oriented toward employment rather then further schooling. Even adding the night-college to the day-college choices does not appreciably change the picture just sketched.

TABLE 1. PERCENTAGE DISTRIBUTION OF COLLEGE-ASPIRATION TYPES FOR BOYS ENROLLED IN DIFFERENT SECONDARY CURRICULA

Type	General	Commercial	Technical	Agricultural	All	Adjusted N
Day-college	72	18	14	9	51	2268
Night-college	3	5	5	1	3	133
Yes-no	7	24	29	17	13	578
Non-college	18	53	52	71	32	1423
No-response	—	—	—	2	1	44
Total	100	100	100	100	100	—
Sample N	2380	1044	2593	1190	7207	—
Adjusted N	2374	694	1013	360	—	4446

To what extent are college aspirations really fulfilled with actual enrolment in colleges? It would be no surprise to learn that expectations for further schooling are often disappointed.

Table 2 (which is taken from an earlier survey of March 1964 graduates shows that about nine-tenths of all the graduates of three vocational types of streams went directly to jobs (slightly fewer from the commercial stream); proportions just over half of the proportions characterized as day-college type in Table 1 went from such schools to college or university (10/18 per cent; 7/14 per cent; 5/9 per cent). Among graduates of the general course, the relationship between likely realization of and aspirations for college entrance is not much better if we look at the figures for those going directly to college or university—42 per cent in Table 2 as against 72 per cent in the day-college aspiration category in Table 1. However, the large 'unemployed' figure for 'general' graduates represents primarily so-called *ronin*, who are taking another year or more to try again to get into the college they prefer.

TABLE 2. PERCENTAGE DISTRIBUTION OF 1964 HIGH SCHOOL GRADUATES' POST-SECONDARY ALLOCATION BY SECONDARY CURRICULUM*

	General	Commercial	Technical	Agricultural	All
College or university	42	10	7	5	26
Employed + study	1	2	2	—	1
Employed	35	86	89	92	60
Unemployed	21	2	2	2	12
Other	1	—	—	1	1
Total	100	100	100	100	100

* Source: Ministry of Education, *Eighty Years' History of Vocational Education* (*Sangyukyoiku-Hachijunenshi*), *Tokyo*, 1966, *pp*. 666—7.

To obtain further perspective on students' educational perceptions, we included a set of questions concerning their feelings about various opportunities for training available to the large majority of youth who could not continue in full-time study. The boys were asked to assume that they would go directly into jobs (regardless of what they in fact expected) and to indicate their inclinations for various types of schooling or training open to working youth. These are (1) night college, (2) other night school, (3) education and training programmes sponsored by an employer, (4) correspondence courses.

The entries in Table 3 show the percentages of students responding positively to each of the educational opportunities (i.e. they either had a definite plan to or would probably take such training). The percentages in this table can add to more than 100, since a student may indicate that he would probably take advantage of more than one kind of opportunity. Half of the day-college pupils find it difficult to envisage a second choice; though the other half (48 per cent) expressed interest in night college. The night-college boys are consistent in their responses. Though most of them would undoubtedly like to attend college full-time, they do not see this as immediately feasible, and they are strongly motivated to learn in whatever way may be possible—as is shown by their comparative inclination not only toward night college, but also toward two of the other choices. Many of the day-college aspirants may so take it for granted that they will go to day college, that they reject thought of any substitute or alternative other than that of being a *ronin*.

A third of the yes-no type indicate considerable interest in night college, (even though they have not taken examinations that would allow entry in the immediate future) but

Table 3. Proportion of Secondary Graduates Who State They Definitely or Probably Would Seek the Given Type of Post-Secondary Training If They Entered the Labour Markets Directly, among Boys of Each Educational—Aspiration Type

Type	Night-college	Other night school	Firm's training	Correspondence course
Day-college	48	19	38	18
Night-college	993	24	47	16
Yes-no	35	19	57	17
Non-college	9	11	56	13

almost three-fifths express an active interest in participation in education and training sponsored by their future employers. They are matched in this by the non-college type responses on training within industry. The strong achievement orientations in Japan are reflected in these responses.

Given that the vocational courses are usually terminal schooling, we might expect that students in those courses who nevertheless have college plans must have especially strong zest for education. They are also surrounded by classmates who expect to go directly into jobs. We might then expect that college aspirants in the vocational curricula would be more inclined to see non-college alternatives as real ones and more inclined to commit themselves to educational alternatives other than the *ronin* route.

This hypothesis is not upheld by the data of Table 4; there is no evidence that day-college aspirants in any of the more vocational curricula are more inclined to consider alternatives of either night-college or training within industry than are pupils in the 'academic' streams. That the lowest responses of day-college aspirants (as of all aspiration categories) are found in the agricultural streams followed by 'General A' should not surprise us, however. Contrary to what an American reader might suppose, the General-B stream is the more academic one, General-A being less focused on preparation for university. General-A classes and schools exist in both urban and rural places, but they are less common in cities and predominate in rural areas where the local choice is between General-A and an agricultural course. Given their rural base, the alternative envisaged by their students in the event of failure to enter university are not likely to include kinds of jobs in which training by the firm is important, and opportunities to attend night-school part-time will also seem small.

Students in the technical senior-secondary schools without aspirations to attend college (when asked the same hypothetical question) displayed a quite different pattern of intentions. They manifest distinctly stronger alertness to the advantages of night-college and especially to employer-supplied training than do pupils in other streams. Nevertheless, among the day-college aspirants, those in commercial and technical courses or schools are as single-mindedly certificate-directed as are the 'general' pupils.

These findings reinforce the evidence of a persistent contrast in the distributions of perceptions of alternatives as between college and non-college aspiration types. Curriculum does influence differentiation of college plans and (as will be shown shortly) occupational expectations, but except as rurality is involved, type of course seems to have little effect upon consideration of possible training and part-time educational alternatives among pupils in any given aspiration category.

TABLE 4. PERCENTAGE OF SECONDARY GRADUATES WHO WOULD TAKE NIGHT COLLEGE, BY TYPE OF SECONDARY CURRICULUM

	GB*	GA	AG	Com	Tech
Day-college type	49·1	32·7	27·9	45·9	48·2
Night-college type	88·4	94·4	86·7	97·9	94·7
Yes-no type	24·2	26·0	13·4	36·4	44·1
Non-college type	10·7	6·5	4·0	8·3	13·6

PERCENTAGE OF SECONDARY GRADUATES WHO WOULD TAKE FIRM'S TRAINING, BY TYPE OF SECONDARY CURRICULUM

	GB	GA	AG	Com	Tech
Day-college type	38·0	36·3	29·7	39·4	39·0
Night-college	46·5	33·4	33·4	44·9	53·8
Yes-no type	42·0	47·1	36·2	58·4	66·7
Non-college type	56·9	50·0	31·6	59·6	68·8

* *GB stands for General-B courses which are college preparatory, GA for General-A courses which are terminal, AG for Agricultural courses, Com for Commercial courses. These notations are sometimes used in following tables.*

Closely related to the question concerning training provided by the employers (column 3 of Table 3) is a question concerning interest in the extent to which a prospective employer might encourage learning activities among employees. The pupils were asked which they would prefer (a) a company which encourages its people to spend time on education even when off duty or (b) a company which has no concern about you except when you are on duty. The proportions of respondents preferring the more encouraging employer were 43 per cent, 58 per cent, 51 per cent, and 41 per cent, going in order from the day-college to the non-college type. Thus the night-college group displays much the most positive attitude (followed by the yes-no type). The day-college boys were little more interested in educational encouragement from employers than were those with no interest in college.

Some writers find it useful to classify one group of repondents as having 'formal aspiration': orientation toward a certificate of higher education seen mainly as a passport in the labour market. Another group would be seen as having 'pragmatic' aspirations, being more specifically concerned with the knowledge and skills useful in a vocation. In the Japanese labour market the certificate of day-colleges has the highest value and that of night-colleges may rank next to it, whereas the other certificates are not so highly appreciated. In other words, day-and-night colleges exemplify the 'symbolic' value of education, while other types of vocational preparation have a more 'pragmatic' value. It is hardly surprising then, to find that the day-college type adheres the most insistently to the prestige certificates, evincing least interest in training at work, however the question may be presented. At the other extreme, the non-college type is set off as distinctively pragmatic at every step, including the fact that they rank lowest in proportion who would like an employer who encourages educational endeavours in leisure time, even though they share with the yes-no type in a high proportion who expressed interest in on-the-job training. The strong motivations of the small number in the night-school type (followed by some of those in the yes-no category) to overcome handicaps is equally clear.

Student career perspectives

It is no great logical leap to assume that there is an interplay between occupational perspectives and college plans, that individuals with certain plans for continuing their education will have distinctive labour market perceptions and related occupational preferences and expectations. In the Japanese context, one might expect also that individuals planning to attend college will prefer to work for government or a large corporation.

TABLE 5. TYPE OF EMPLOYER'S PREFERRED BY BOYS IN EACH EDUCATIONAL ASPIRATION TYPE

	Day college	Night college	Yes-no	Non-college
Government or big company	46	35	36	31
Self-employed	43	41	45	42
Medium or small company	8	23	18	26
No response	3	1	1	1
Total	100	100	100	100
N	2357	257	1365	3169

Table 5 shows the type of employer preferred is about the same for boys in each of the educational-aspiration categories. Somewhat over two-fifths in each group hope to become self-employed. For all except the day-college group, another third express a preference for jobs with big corporations or government. The day-college group take a much stronger position on this, however, and only 8 per cent of them as against 18 to 26 per cent in the other college-aspiration categories, express preference for the medium or small employers.

The occupational expectations of individuals are further specified into two variables: expectation status level, and types or kinds of activities. The students were asked the question: 'Looking ahead 20–30 years after graduation from your final school, what kind of work would you like best to be doing and in what sort of organizations or employment status would you like to work? State what you think you are *in fact* most likely to be doing and describe it fully'. This question followed one in which they were asked to say what they would like to do in their 'dreams'. The occupations individuals gave as their realistic expectations are here classified into six status levels, whose accumulative percentage distributions are shown in Table 6 for each college-aspiration type.

TABLE 6. CUMULATIVE PERCENTAGE DISTRIBUTION OF STATUS OF BOYS' EXPECTED OCCUPATIONS, BY EDUCATIONAL ASPIRATION TYPE (% AT GIVEN LEVEL OR ABOVE IN EXPECTED STATUS)

	Day college	Night college	Yes-no	Non-college
1 (high)	12	4	2	2
2	40	29	22	20
3	66	51	46	41
4	93	89	81	75
5	98	95	93	86
6	100	100	100	100
N	2357	257	1365	3169

Not unexpectedly, boys who expect to attend day-colleges have distinctively higher occupational expectations. The gap between them and the next, night-college group, is impressive, though the distributions display the anticipated rank ordering of expectational levels throughout.

The kind of occupation the secondary school seniors expected to achieve are summarized in Table 7. Secondary school is widely diffused in Japan, but nevertheless, seniors continue to be optimistic in their occupational expectations.

TABLE 7. PERCENTAGE DISTRIBUTION OF TYPE OF OCCUPATION EXPECTED BY BOYS, BY TYPE OF EDUCATIONAL ASPIRATIONS

	Day-college	Night-college	Yes-no	Non-college
1. White collar: professional, administrative, & clerical	49	36	23	16
2. High engineering & technician	20	23	23	19
3. Business executive	15	19	222	226
4. Retail proprietor	7	9	15	15
5. 6. 7. Skilled or low technician	4	9	8	9
8. Agriculture, etc.	2	2	5	12
Other & no response	3	2	4	3
Total	100	100	100	100
N	2357	257	1365	3169

About a fifth, irrespective of college aspirations, express 'realistic' hopes of becoming high school technicians. The more professional and bureaucratic (or clerical) white-collar jobs are expected by almost half of the day-college type and by a third of the night-college boys, as against much smaller proportions of those who do not expect to attend college. Among the latter types, more expect to be business managers and retail proprietors than among college types, and the yes-no and non-college groups include relatively high proportions in manual-technical jobs and in primary industry. The fact that 12 per cent of the non-college type expect to work in primary industry goes along with the prevalence of this type among pupils taking agricultural curricula.

There is in fact a strong interplay between college-aspiration type and secondary school curricula as both relate to occupational aspirations. Regardless of whether the students have college plans or not, those in the most academic (General-B) streams are relatively highly oriented toward white-collar occupations, whereas business manager and retail proprietor careers are more often sought or expected by students of General-A and Commerce streams. It is natural that agricultural students should be oriented toward agriculture; many of those who go on to college will still pursue agricultural studies. Technical students expect to become high-level technicians. Let us explore the varying occupational aspirations in relation to type of secondary-school course among the day-college aspirants (Table 8).

The most prestigeful positions (here for short designated 'white collar') attract about half the students in the two general courses and more than half of those in commercial courses as against two-fifths of the agricultural and a quarter of the technical pupils. The higher technical positions are the most popular category among technical students and receive appreciable numbers from the two general courses. Apart from the sizeable stream of agricultural students into 'white collar' jobs (doubtless in large proportion teaching and the lower civil service), their only other marked preference is for primary industry.

TABLE 8. PERCENTAGE DISTRIBUTION OF TYPE OF OCCUPATION EXPECTED BY PUPILS IN DIFFERENT TYPE OF COURSES

	Day-college type					Night-college type					Yes-no type					Nen-college type				
	GB	GA	AG	Com	Tech	GB	GA	AG	Com	Tech	GB	GA	AG	Com	Tech	GB	GA	AG	Com	Tech
1. White collar	50	48	41	55	28	63	27	22	39	22	40	31	17	31	14	22	22	8	26	9
2. High technician	21	15	4	4	37	8	9	11	9	47	20	8	11	5	42	25	8	5	5	41
3. Business executive	15	7	11	18	16	4	46	11	27	18	12	23	9	28	24	22	34	11	33	24
4. Retail proprietor	6	15	3	15	5	13	9	0	18	2	15	16	4	30	7	11	18	7	32	7
5.6.7. Skilled and low technician	3	8	4	2	10	4	9	22	7	9	5	12	12	2	10	8	6	5	2	17
8. Agriculture, etc.	2	7	36	2	1	4	0	34	0	1	3	3	44	1	1	9	7	62	0	1
Other, no response	3	0	1	4	3	4	0	0	0	1	5	7	3	3	2	3	5	2	2	1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	1649	55	111	185	357	43	18	15	49	132	62	104	202	250	747	65	368	841	557	1338

There will of course be a vast amount of 'slippage' between these adolescent aspirations and adult attainments. The varying rates of entry to college from the various curricula were already displayed, in Table 2. The distribution among curricula and aspiration types of 'candidates' for the most sought-after positions can be estimated by computing the numbers aspiring to enter 'white collar' positions, for example. Moreover, Japanese youth are becoming familiar with the fact that college degrees today are obtained by a growing proportion of the population and that the market value of degrees is threatened. At the same time, a college education requires heavy expenditure by the student or his family. It is not without interest, therefore, to examine the pupils' perceptions of the value of a college degree in the labour markets. We asked students how far they agreed or disagreed with the statement, 'With the number of college graduates increasing so much, it is difficult for even the college graduates to find a job. Therefore, the value of going to university and paying the high cost will be going down'. The degree of respondents' commitment to college or college aspirations may be influenced by their perceived value of it in the labour markets.

In this context it is interesting to refer to the peculiar Japanese phenomenon, 'the *ronin*', who is unsuccessful in college-entrance examinations and is engaged exclusively in preparing for the entrance examination in the following year. (If he has passed the examination in one year of special preparation after graduating from high school, he is called '*ichi-ro*' or one year *ronin;* if he needs two years' preparation after his graduation, he is called '*ni-ro*' or two years' *ronin*, and so forth). Being willing 'to sacrifice anything' to pass the entrance examination, presumably the *ronin* is motivated by a strong belief in the value of a degree from a select university. Taking into consideration this group with strong aspirations for elitist college education, we subdivided the day-college aspirants into three sub-groups in accordance with their expressed determination or willingness to spend a year or so as '*ronin*', should they be unsuccessful initially. New additional types are termed 'day-college-elitist type', 'day-college-intermediate type', and 'day-college-modest type'. These three types as well as the other original three types were used as variables for analyzing the association of college aspirations with respondents' labour-market perceptions.

The first (total) column of Table 9 shows a systematic relationship between college plans and evaluation of a college degree in the labour market. From the day-college-elitist type through the non-college type, the percentages of respondents with positive evaluation of college degrees decrease steadily—and it does so whichever secondary course the boy is taking.

TABLE 9. PERCENTAGE OF PUPILS WHO STATE THAT THE VALUE OF A COLLEGE DEGREE IS NOT DECREASING, BY TYPE OF SECONDARY CURRICULUM

	Total	GB	GA	AG	Com	Tech
(Aspiration type)						
Day-college elitist	79	76	72	75	93	84
Day-college intermediate	75	73	59	79	87	77
Day-college modest	72	71	73	65	990	76
Night-college	70	69	71	53	70	71
Yes-no	68	51	68	64	72	69
Non-college	57	52	61	58	60	53

Especially striking, however, is the high valuation placed on degrees by college-aspiring youth in the commerce and (less marked) the technical streams. Students with handicaps in their curricula for entrance examination, but who nevertheless strive to enter college or university are clearly youth who see this as very important and worth the cost and effort entailed. Conversely, as we might expect, the non-college and yes-no groups in the General-B curricula are the least inclined to value college education.

Concluding remarks

(i) For the most part, the foregoing analysis has delineated the educational and occupational aspirations of secondary-school boys expressing different intentions with respect to attendance at college. Some of the differences identified derive of course from the social characteristics of the boys self-assigned to the four aspiration types. In Tables 10 and 11 are shown the percentages of boys expressing the day-college or another aspiration among boys whose fathers had different levels of schooling or occupation. Both the elements of rigidity and of fluidity in the Japanese status structure are reflected in these tabulations, taken jointly with the others in this article.

As one would expect in so well-schooled a population as that of Japan, sons of university graduates are overwhelmingly oriented toward attending college in the normal, day-time, fashion. However, it is no less noteworthy that a third of the sons of men with no more than elementary schooling express the same intentions. Sons of men engaged in the more respected and well-paid occupations likewise expect to attend daytime college in nearly all cases, but so do a quarter of the sons of farmers. The non-college category is even more sharply graded in the opposite sense.

(ii) One can debate as to whether Japanese boys hold unrealistic (symbolic, in Havighurst's sense) educational aspirations. The wide prevalence of seeming willingness to follow 'the way of the *ronin*' rather than accept a substitute for the preferred sort of education would seem to indicate a high level of 'symbolic' orientations toward education. Indeed, each type of post-secondary educational aspiration embodies a relatively narrow perception of education.

(iii) Under prevailing conditions, a large proportion of Japanese boys will experience frustration of their educational hopes. But (as one can infer from a comparison of Tables 1 and 2) the ratio of attainment to anticipation of further full-time schooling is quite similar for all types of secondary school curricula. No doubt the association of parental status and son's aspirations (see Tables 10 and 11) plays its part not only in supporting the aspirations, but in determining the likelihood that particular aspirations will be fulfilled.

(iv) Aspirations to attend college and occupational expectations are interrelated in complex ways though the broad patterns can be summarized readily. The day-college type prefer the higher-status positions with big corporations or government. Those in the non-college category express a preference for medium or small employers and correspondingly modest positions. The professional and bureaucratic men that play so key a role in contemporary Japan are disproportionately recruited from those with day-college aspirations. (Though it is not dealt with in this article, those men also will attend a rather limited set of elite universities). We cannot know how contentedly boys with the ambivalent ('yes-no') or unambitious (non-college) aspirations accept their expressed career forecasts, but there does seem to be a predominant 'realism' among these categories, who see themselves as employed in manual-technical jobs and in primary industry.

TABLE 10. RATE OF OCCURRENCE OF DIFFERENT EDUCATIONAL ASPIRATION TYPES AMONG BOYS WHOSE FATHERS HAD GIVEN SCHOOLING

	Day-college	Night-college	Yes-no	Non-college	Total
University	86	1	6	7	100
Junior college	73	3	7	17	100
Secondary	56	3	13	28	100
Elementary	33	4	18	45	100

TABLE 11. RATE OF OCCURRENCE OF DIFFERENT EDUCATIONAL ASPIRATION TYPES AMONG BOYS WHOSE FATHERS HAD GIVEN TYPE OF OCCUPATION

	Day-college	Night-college	Yes-no	Non-college	Total
Academic, political, social	84	1	6	9	100
Administrative, clerical	66	3	12	19	100
Transport, services	44	2	19	35	100
Manufacturing, construction	42	4	18	36	100
Agriculture, etc.	26	4	17	53	100

(v) The boys' perceptions of the market value of college degrees also are closely associated with their aspirations for post-secondary schooling or training. Whichever be prior, those with the strongest and highest aspirations for college education are most confident that the degree holder will be suitably compensated.

(vi) In all these relationships, the secondary curriculum (or stream) in which the boy is enrolled has a strong influence over his perceptions, aspirations, and expectations. Though the data are not drawn into this particular discussion, we know that the effect of curriculum is partly illusory: choice of curriculum or admission to it reflects family status. But family status has no tight relationship to children's courses or aspirations. That is, there remain strong elements of fluidity in the Japanese status system alongside the more often noticed elements of rigidity. Curriculum is a useful predictor of a boy's later schooling and his orientations to his career, both subjectively and objectively, but its prediction power nevertheless is moderate, not decisive.

APPENDIX F

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Occupational Aspirations of Japanese High School Students

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Abstract—This article deals with a relationship between occupational aspiration levels of Japanese male senior high school students and their social class origins. A comparison of our results with a small survey in the United States has shown a contrast: Japanese students of middle and lower social class origins had much higher aspirations than did the corresponding American students. Furthermore, the aspiration scores of Japanese students of lower social class origins turned out to be slightly higher than those of the students of middle class origins. A series of tests demonstrate that the flatness or even curvilinearity of the distribution of students' occupational aspiration levels cannot be attributed to response biases. The pattern was repeated within each type of curriculum, in rural and in urban area, including and excluding sons of farmers, and within student class-rank categories. Furthermore, the tests included examination of characteristics of students who did not respond to the questions on occupational aspirations. Sensitivity tests (not detailed here) demonstrated also that the contrast between the Japanese and U.S. findings could not be attributed to any differences in status coding. We concluded that Japanese students' occupational aspiration levels are much less influenced by their social class origins than might be expected.

THE main objective of this article is to report on an investigation of the extent to which the occupational aspirations of Japanese senior high school students are influenced by parental background. Most of the previous studies on this subject have shown that students' aspiration levels are positively correlated with the social class of their parents. Some of the previous studies have shown that there is a large discrepancy between the occupations students of lower social-class origins prefer and the ones they think they actually can obtain. In other words, the lower a student is on the social class ladder, the greater is the disparity between his aspirations and his expectations. The following report is devoted to a reassessment of the generality of these previous findings in the light of some new Japanese data(1) Most of the paper is devoted to an analysis of the Japanese findings, but a direct comparison (and contrast) with a small U.S. study is also presented.

The population covered by our survey is male seniors in a set of public senior secondary schools in central and western Japan in the autumn of 1966. This is not a general probability sample but a stratified one, representing schools of all major types(2) in five cities and in rural areas in the same or adjacent prefectures.(3)

The Japanese students' responses concerning their fathers' occupations and their own occupational aspirations were categorized by status level and type. We began with the Duncan prestige index,(4) for although this scale cannot be applied automatically to Japan prestige studies in Japan give results for most occupations that are very close to those for the United States.(5) We set up eight status levels corresponding to Duncan-scale values as shown in Table 1. Although entire matrices of occupational aspirations and expectations in relation to parental status were carefully examined for the entire sample and for various sub-populations, the results are summarized here by the use of mean values of students' outlooks within each category of parental status. In the computation of these means each of the initial eight status codes was assigned the weighted value indicated in Table 1. In addition to the fact that this made possible summary presentation of extensive sets of interrelationships, it also facilitated comparison with the American study.

TABLE 1. The Duncan Scale, the Eight Status Categories, and the Value Weights for Computations of mean Students' Occupational Aspiration Scores.

Duncan Scale	Eight Status Categories	Value for Aspiration Score
80 or more	1	9·0
70–79	2	7·5
60–69	3	6·5
50–59	4	5·5
35–49	5	4·2
25–34	6	3·0
11–24	7	1·8
10 or less	8	0·5

PARENTAL STATUS AND OCCUPATIONAL ASPIRATIONS OF JAPANESE STUDENTS

The average levels of occupational aspirations for Japanese students from different social origins are presented in Table 2.(6) As was to be expected, both for preferred and for expected occupations students of higher origins have higher aspirations than do students of middle and lower social class origins. Nevertheless, our findings are somewhat different from previous ones in that the aspiration levels of students from the bottom three strata turned out to be slightly higher than those of students from status level 5; hence we have a slightly curvilinear pattern. Also, the difference between students' aspirations and expectations tends to be largest in the middle strata instead of in the lower strata.

This curvilinear relationship between fathers' occupation and students' occupational aspiration levels was an unexpected finding, for which it is possible to suggest a number of hypotheses.

It might be supposed that only those students with relatively high ability and high aspiration level are recruited into the present senior high schools from lower social classes, whereas most of the sons from middle and higher strata attend. In other words, the lower-status students may be a more select group with respect to ability and aspirations. If this is the case we should find (a) that students who rank relatively high in achievement have relatively high occupational dreams and expectations:
moreover (b), among the students who responded on the occupational aspiration questions the proportions ranking high in school achievement should be greater among sons of low status fathers than among sons of middle (or high) status fathers. We had no intelligence test scores or grade records, but one item on the questionnaire did ask students to rank themselves on achievement relative to their classmates. Using these self-assessments we found a moderate positive relationship between class-rank and occupational aspirations (Table 3).(7) Both for the occupations students expect to have

TABLE 2. Average Occupational Aspiration Scores for Each Father's Status Level.

Father's Status Level	Students' average Aspiration Score									
	Excluding Students' in Agricultural Course					Including Students' in Agricultural Course				
	Preferred		Expected		Difference	Preferred		Expected		Difference
	(M)	(N)	(M)	(N)	(Pref-Exp)	(M)	(N)	(M)	(N)	(Pref-Exp)
1	7·45	40	8·15	33	−·70	7·45	40	8·15	33	−·70
2	7·03	106	6·80	95	+·23	7·03	106	6·75	96	+·29
3	6·91	354	6·56	327	+·35	6·90	358	6·55	330	+·35
4	6·92	348	6·31	309	+·61	6·89	358	6·27	318	+·62
5	6·54	630	6·04	532	+·50	6·40	749	5·74	653	+·66
6	6·60	473	6·06	430	+·54	6·51	521	5·91	482	+·60
7	6·63	381	6·15	336	+·48	6·62	388	6·13	342	+·49
8	6·68	41	6·33	43	+·35	6·69	42	6·22	45	+·47

TABLE 3. Percentage Distributions of Occupational Aspiration Levels within Class-rank Categories

	(A) Expected				(B) Preferred		
	Class-rank				Class-rank		
Aspiration Level	High	Middle	Low	Aspiration Level	High	Middle	Low
1	9	6	5	1	21	14	13
2	24	23	17	2	34	33	31
3	26	23	24	3	19	19	17
4	28	32	36	4	18	23	22
5–8	13	16	18	5–8	8	11	17
Total	100	100	100	Total	100	100	100

in 20 or 30 years and for those they aspire or dream to have, students' occupational aspirations rise as we go up the class-rank categories. In other words, condition (a) is fulfilled. However, as Table 4 shows, students' class-rank is almost unassociated with parental status: condition (b) is not fulfilled. It is still of interest, nevertheless, to relate patterns of aspirations to parental status within each class-rank (Table 5). Again there is a consistent curvilinear relationship within each of the three class-rank categories. There is no evidence to support the argument that ability selectivity or response biases associated with ability can explain the flatness or even curvilineality of the relationship between occupational aspirations and parental status.

TABLE 4. Percentage Distributions of Class-rank for Each Father's Occupational Status

Father's Occupational Status	Student's Class-rank				
	High[a]	Middle	Low[b]	NR	Total
1	28	26	34	12	100
2	33	29	29	9	100
3	37	30	27	6	100
4	32	35	28	5	100
5	31	34	30	5	100
6	37	32	27	4	100
7	32	32	31	5	100
8	29	29	38	4	100

[a] The two highest "fifths" as reported by students

[b] The two lowest "fifths" as reported by students

TABLE 5. Occupational Aspiration Scores for Each Father's Status Level and Student's Class-rank Position.

Father's Status Level	Student's Class-rank					
	High		Middle		Low	
	(Exp)	(Pref)	(Exp)	(Pref)	(Exp)	(Pref)
1	7·85	6·79	8·44	7·89	8·00	7·40
2	6·92	7·43	6·70	7·08	6·28	6·57
3	6·73	7·21	6·61	6·84	6·21	6·78
4	6·46	7·24	6·29	6·73	6·12	6·79
5	5·72	6·63	5·76	6·45	5·62	6·06
6	6·26	6·84	5·86	6·54	5·70	6·42
7	6·48	6·87	6·07	6·72	5·65	6·37
8	6·31	7·25	6·20	6·63	6·66	6·69

It is quite conceivable that students in urban areas have higher aspiration levels than do rural students. As stated above, the prestige scores of farm-owners are somewhat lower in Japan than in the U.S., and a large proportion of Japanese fathers in rural areas were therefore classified into levels 5 and 6; this in turn might explain why the scores of the students from middle strata are consistently the lowest. In order to test this hypothesis, and to see whether, setting farm backgrounds aside, remoteness from urban life in itself affects students' aspiration levels, the scores of rural students excluding sons of farmers were compared with those of students in urban areas (Table 6).(8) Since most senior-secondary schools in rural areas in Japan are general college preparatory, general non-college preparatory, or agricultural schools, and type of school affects aspirations it is necessary to control the type of curriculum in which students were enrolled. (This is done on the right-hand side of the table.) As might be expected, students in urban areas have consistently the higher expectation scores. On the other hand, the patterns of expectation levels in relation to paternal status are similar in urban and in rural schools. As a result, it seems quite clear that we must reject the hypothesis that the low expectation levels of the students from middle strata are due to lower rural expectation scores.

TABLE 6. Expected Occupation Status Scores of Urban and of Rural Students of Non-farm Origins.

Father's Status Level	Expected Occupation Status Scores							
	Total				Students in general college Preparatory Course			
	Urban		Rural		Urban		Rural	
	M	N	M	N	M	N	M	N
1	8·17	27	8·29	7	8·38	24	8·29	7
2	6·85	77	6·17	21	6·90	61	6·56	18
3	6·59	250	6·48	74	6·71	171	6·70	60
4	6·43	254	5·98	67	6·78	122	6·40	39
5	6·17	288	5·81	58	6·54	112	5·93	35
6	6·15	237	5·90	53	6·56	62	5·75	25
7	6·16	268	5·89	71	6·66	79	6·20	39
8	6·70	28	6·02	13	7·75	4	6·92	6

It is appropriate at this point to explore further the relationship between type of course and occupational aspirations. First, it should be noted that, as we might expect, response rates on questions about occupational expectations and aspirations differed by type of curriculum. The non-response ratios were highest among students in the general non-college preparatory course (52 percent in expected and 45 percent in preferred occupations).

Table 7 shows the distribution of aspirations and expectations by the type of course in which boys were enrolled. Students in general college preparatory course reported the highest aspiration levels, followed by technical course, commercial course, general non-college preparatory course, and agricultural course students. Nevertheless, relationships to parental status are essentially the same within the general college preparatory, the commercial, and the agricultural streams as for all students taken together; those from the lower and higher social strata tend to have higher aspiration and expectation levels than those from middle strata. As for general non-college preparatory course and technical course students, the distributions of their aspiration and expectation levels are almost horizontal. Again there is no evidence to support the notion that youth with low-status backgrounds have the lowest aspiration levels.

The differences between aspirations and expectations are especially large among non-college preparatory general course and agricultural course students, however. This is probably due to the fact that most students in

TABLE 7. Occupational Aspirations Within Each Type of Course.

Father's Status Level	General College Preparatory			General Non-college Preparatory			Agricultural			Commercial			Technical		
	Pref.	Exp.	Dif.	Pref.	Exp.	Dif.	Pref.	Exp.	Dif.	Pref.	Exp.	Dif.	Pref.	Exp.	Dif.
1	7·42	8·36	−·94	*	—		—	—		—	*		*	*	
2	7·21	6·82	+·39	*	*		*	*		6·91	6·77	+·14	7·03	6·67	+·36
3	7·06	6·71	+·35	6·19	5·78	+·41	6·87	5·72	+1·15	6·55	6·23	+·32	6·73	6·42	+·31
4	7·16	6·68	+·48	6·58	5·50	+1·08	5·92	4·88	+1·04	6·55	6·04	+·51	6·72	6·05	+·67
5	6·73	6·30	+·43	6·32	5·38	+·94	5·62	4·42	+1·20	6·12	5·68	+·44	6·68	6·17	+·51
6	6·78	6·32	+·46	6·32	5·66	+·66	5·58	4·72	+·86	6·41	5·86	+·55	6·70	6·14	+·56
7	7·05	6·51	+·52	6·37	5·53	+·84	6·11	5·01	+1·10	6·30	5·63	+·67	6·52	6·29	+·23
8	6·87	7·25	−·38	6·32	5·62	+·70	5·68	4·34	+1·34	6·89	6·26	+·63	6·47	6·08	+·39

* Frequencies are less than 5.

these two courses are sons of farmers, and that a relatively large number of them are under pressure to succeed their fathers in maintaining the family farm. Non-response rates on expected occupations were lowest in the general college preparatory and the agricultural curricula (39 and 40 percent). However non-response on aspiration levels, though lowest in college preparatory course (at 32 percent) were higher among the agricultural students (40 percent) than any other except the non-college general curriculum.

In addition to the two questions on students' occupational aspirations and expectations discussed so far, we asked what occupation boys expect to have just after leaving senior school or college. A comparison between college preparatory and vocational students in these three kinds of occupational aspirations reveals some interesting relationships between occupational aspirations and college expectations (Table 8).

As might be expected, college preparatory students had higher status images than did vocational students both in their dreams and in the two expectations (first occupation and occupation in 20 or 30 years). It should be noted, however, that the differences between the level of occupations college preparatory students and vocational students expected to have in 20 or 30 years are much smaller than the differences between what the former expected to have just after graduating from college and what the latter expected to have just after leaving senior high school. In other words, vocational students expected a much larger improvement in their occupational status between entry jobs and peak attainment than did college preparatory students. Second, the differences between the dream occupations and those expected in 20 or 30 years are very similar between the two groups of students; the two groups displayed the same degree of confidence in realizing their dreams.

Finally, we speculated that students of the lowest social-class origins may overlook various occupations in the middle strata that students of intermediate status origin know in more detail through their fathers' experiences. This in turn might cause students of intermediate origins to be more realistic than those of lower origins. There is some evidence for this hypothesis in the shapes of expectation distributions among the sons of fathers in status levels 5 and 6 as

TABLE 8. Entry and Peak Occupational Anticipations of Students in College Preparatory and Terminal Curricula by Father's Occupational Status.

Father's Occupational Status	(A) Students in General College Preparatory Course					(B) Students in Vocational Course*					(C) Difference between A and B		
	I	II	III	(II–I)	(III–II)	IV	V	VI	(V–IV)	(VI–V)	(I–VI)	(II–V)	(III–VI)
1	7·6	8·4	7·4	·8	−1·0	—	—	—	—	—	—	—	—
2	6·6	6·8	7·2	·2	·4	5·3	6·8	6·9	1·5	·1	1·3	·0	·3
3	6·3	6·7	7·1	·4	·4	5·1	6·2	6·6	1·1	·4	1·2	·5	·5
4	6·2	6·7	7·2	·5	·5	4·8	6·0	6·6	1·2	·6	1·4	·7	·6
5	6·2	6·3	6·7	·1	·4	4·7	5·9	6·4	1·2	·5	1·5	·4	·3
6	6·3	6·3	6·8	·0	·5	4·7	5·9	6·5	1·2	·6	1·6	·4	·3
7	6·1	6·5	7·1	·4	·6	4·6	6·0	6·4	1·4	·4	1·5	·5	·7
8	6·9	7·3	6·9	·4	·4	4·6	6·1	6·6	1·5	·5	2·3	1·2	·3

* adjusted averages among those students in general non-college preparatory, commercial, and technical course. These are not strictly speaking terminal, but few in these curricula will go to college.

I Occupations students expect to have after leaving college.

IV Occupations students expect to have after leaving secondary school.

II, V Occupations students expect to have in 20–30 years.

III, VI Occupations students aspire to enter.

against those from the lowest status backgrounds. The former have expectations that are distributed with much less skew around a model level of 4, with quite a few at level 6 (11 to 17 percent), whereas the responses of the latter are highly skewed with only 2 to 3 percent at level 6.

OCCUPATIONAL ASPIRATIONS OF SOME AMERICAN AND JAPANESE STUDENTS COMPARED

Table 9 shows the average level of occupational aspiration and expectations among a small sample of U.S. male students in the last year of secondary school.⁽⁹⁾ Before comparing these with the Japanese data, it is necessary to consider certain characteristics of the U.S. study. First, it was made in one state only (Washington), in 1955. Second, status was measured in terms of a scale formed by combining the North-Hatt and the Smith scales; the result is similar to the Duncan scale but not quite the same. Third, this combined scale was collapsed into ten status categories by taking, from the highest (10) to the lowest (1) in order, ten percent of 149 occupations presented in one or both scales; therefore it should be noted that the cutting points of the ten status categories do not correspond exactly with those of the Japanese data. A detailed comparison of occupational scaling demonstrated that the contrasts observed between the U.S. and Japanese study samples could not be diminished by any reasonable adjustments in status coding.

Table 9. Occupational Aspirations of U.S. Students* (Male senior students in High schools in the State of Washington in 1955).

Fathers' Occupational Status	Students' Average Aspiration Score				
	Preferred		Expected		Difference
	(M)	(N)	(M)	(N)	(Pref-Exp)
(High) 10	7·84	6	7·83	6	+·01
9	7·92	12	8·36	8	—·44
8	7·63	52	7·26	42	+·37
7	7·26	57	7·32	41	—·06
6	6·61	174	6·45	132	+·16
5	6·87	97	6·46	69	+·41
4	6·47	184	5·99	129	+·48
3	6·23	115	5·70	87	+·53
2	6·07	56	5·69	45	+·38
1	5·36	11	4·50	6	+·86

* LaMar T. Empey, Social Class and Occupational Aspirations, A.S.R. Vol 21, No. 6 Dec. 1955, pp703–709

Those contrasts are striking. The aspiration levels of the Japanese students of lower social origins are much higher than those reported by the corresponding U.S. students, with the result that parental social status appears to have much less impact in Japan than in the northwestern United States. Also, the difference between aspirations and expectations tend to increase among the U.S. boys as the occupational status of fathers becomes lower. A different pattern is apparent in the Japanese data; in Japan it is among the students who have middle-rank fathers that we find the largest difference between aspirations and expectations.

Because of the high non-response rate of the Japanese study, we have carefully analyzed the frequency distributions of aspirations and expectations at each occupational status level of father. We searched for possible biases in Japanese responses that might distort the observed relationships of students' outlooks to their social origins. However, we identified no biases that could explain the fact that occupational aspirations of Japanese students from low status backgrounds equalled or even exceeded those from middle-level homes.

Since nothing is mentioned about non-response rates in the U.S. study, we cannot compare the non-response rates of the two samples. The non-responses (which include unclassifiable responses) of Japanese students on the items dealing with aspirations and expectations might be attributed to the following two factors. First, students could fail to describe accurately their aspirations and expectations even when they had sufficient ideas about their occupational careers. Second, they could lack ideas or have only vague perceptions of occupational alternatives or prospects. It is of course difficult to decide which of the above two factors was in fact more important. However, in laying out and administering the questionnaires we had taken special care to obtain as full and unambiguous answers to occupation questions as possible, and in general the students filled out the questionnaires accurately and conscientiously. It is hardly accidental that the response rates on questions relating to subsequent careers were lowest among the students in the non-college general curriculum, which has the least career orientation. Evidence seems strong that a large minority of students are in fact extremely vague in their views of future careers.

There is one American study that might shed some light on this problem.(10) Seymour Lipset and his colleagues report that about 47 percent of high school graduates in the United States did not have any specific job plans while they were in school; the proportions were 78 percent for those with an eight grade education or less and 13 percent for college graduates. This study was based on the retrospective responses of males aged thirty or over who had completed their education by the 1930's. It is conceivable that some of the responses were inaccurate, and also that improved guidance systems may have increased students' knowledge of occupational prospects. Nevertheless, this study suggests that many students have only dim ideas about their future occupational careers. If we assume that all students who had relatively specific job dreams or hopes responded adequately to our questions, we could say that about 40 percent of senior students in Japanese public high school were decidedly hazy in their views of the future.

Non-respondents are a distinct group in every research. The study made by Lipset and his colleagues and our study indicate that it is quite important to inquire into the degree of 'specificness' of students' jpb perceptions. Until such research is carried much further it will be difficult to reach any firm conclusions concerning relationships between parental status and occupational aspirations or how these relationships may shift and why. It may well be that in Japan and also elsewhere the most critical questions relate to degree of clarity of perceptions rather than to aspiration levels.

REFERENCES

1. This information was obtained as a part of a multifaceted research financed by the U.S. Office of Education and the Carnegie Foundation and directed by Professor MARY JEAN BOWMAN of the University of Chicago. The author is grateful to Professor C. A. ANDERSON and to Professor BOWMAN for their encouragement and for their suggestions for analysis of these data. I am also grateful for help and criticisms from associates in the Comparative Education Center, especially to JERRY B. OLSON who kindly refined my English.
2. We sampled 7,207 male students at 57 senior high schools (27 general, 13 technical, 11 commercial, and 12 agricultural streams). However, the number of students in the following analysis was reduced to about 4,400 in adjusting our sample to the actual distribution of all Japanese students by type of course.
3. The urban areas (Tokyo, Osaka, Fukuoka, Hiroshima, and Tokushima) were chosen among the chain of prefectures and highly industrialized districts running southwestward from Tokyo along the Pacific Ocean and the Inland Sea of Seto to the northern part of Kyushu. Considering transportation time, facilities available, and geographical characteristics, we chose the following four rural areas: the southern part of Shikoku island (including western Ehime, eastern and western Kochi and Tokushima prefecture), the northern part of Hiroshima prefecture, the rural parts of Wakayama prefecture (south of Osaka), and rural Tochigi prefecture.
4. See OTIS DUDLEY DUNCAN, "A Socioeconomic Index for All Occupations," Chapter VI and VII in ALBERT J. REISS, Jr., *et al., Occupations and Social Status*, New York, Free Press, (1961).
5. See Research Committee, Japan Sociological Society, *Nihon Shakai no Kaisoteki Kozo* (The Class Structure of Japanese Society), (1958). We introduced a few modifications where we had strong reasons for believing that the Japanese situation was markedly different. Although the number of occupations covered in the 1958 Japanese survey was limited, the prestige scores of the 32 occupations from that survey matched very closely the Duncan scale and other U.S. studies of occupational prestige, with three exceptions: farm owners, priests, and engineers

in Japan were considerably lower in prestige than the corresponding occupations in the United States and they were therefore assigned codes lower than on the Duncan scale. There are a few occupations that are distinctly Japanese; numbers in those occupations were few. Nevertheless, in order to give them status codes we made out cards for them, along with a selection of occupations from the Duncan list. Five independent judges were asked to group the cards into eight status levels; the judges agreed within one step in the classification of all the added distinctively Japanese occupations. (The Japanese Census categories follow the international classification very closely. To facilitate coding in Japan we therefore used the international classification as a reference, but we regrouped and divided some occupationsin order to align them with the U.S. classifications and to permit their location on the Duncan scale.)

6. About 8 per cent of the total sample has been excluded from the analysis because students' answers on their fathers' occupation were insufficient to be coded into occupational level and type. Furthermore, about 40 per cent of the remaining sample has been also excluded from the analysis because students' responses on their occupational aspirations were inadequate. On the question dealing with the occupations students expect to have in 20 or 30 years non-response and unclassifiable answers made up 42 per cent; on the question dealing with the occupations students aspire to have the corresponding rate was 35 per cent. There was little evidence of selectivity of response rates by parental education or occupational status. however. On occupation expected 20–30 years hence non-response rates ran (from high to low parental status): 43, 32, 39, 41, 43, 43, 43, 32. For occupational dreams they ran 31, 25, 34, 34, 34, 38, 38, 36 respectively.
7. Overall our data on students' occupational aspirations are biased upward because of class-rank selectivity of response, but this does not imply any social status selectivity in that bias. Response rates by class-rank from highest to lowest achievement quintile were 37, 39, 41, 45, 50 for expected and 30, 33, 34, 38, 42 for preferred occupations.
8. The mean scores on occupational expectation levels of sons of farmers are 5·62 in schools in urban areas and 5·36 in schools in rural areas.
9. See LaMar T. Empey, "Social Class and Occupational Aspirations," *A.S.R.*, V 21, No. 6, 703–709. Dec. 1956.
10. Seymour M. Lipset, Reihard Bendix, and F. Theodore Malm. "Job Plans and Entry into the Labor Market," in Sigmund Nosow and William H. Form, *Man, Work, and Society*, (1962).

Résumé—Cet article traite d'un rapport entre les niveaux des aspirations relatives à leur emploi futur des élèves masculins de l'enseignement secondaire japonais et leurs origines du point de vue de leur classe sociale. Une comparaison de nos résultats et d'une petite étude faite aux Etats-Unis a présenté un contraste: les élèves japonais dont les origines se situaient dans les classes sociales moyennes et inférieures avaient des aspirations bien supérieures à celles des élèves américains qui leur correspondaient. De plus, les points correspondants aux aspirations des élèves japonais aux origines de classe sociale inférieure se révélèrent légèrement supérieurs à ceux des élèves aux origines de classe moyenne. Une série d'épreuves démontre que l'aspect plat ou même incurvé de la répartition des niveaux des aspirations relatives à leur emploi futur des élèves ne peut être attribué à l'influence des réactions. L'exemple s'est reproduit pour chaque genre de programme, dans les régions rurales et urbaines, y compris et sans tenir compte des fils de fermiers, et dans les catégories d'élèves secondaires. Les épreuves comprirent en outre un examen des caractéristiques des élèves qui ne réagissaient pas aux questions sur les aspirations relatives à l'emploi futur. Des épreuves de sensibilité (dont le détail n'est pas donné ici) démontrèrent aussi que les conclusions japonaises et américaines ne pouvaient être attribuées à des représentations différentes de l'état social. Nous en avons conclu que les niveaux des aspirations relatives à leur emploi futur des élèves japonais sont beaucoup moins influencés par leurs origines de classes sociales que l'on pourrait s'y attendre.

Zusammenfassung—Dieser Artikel beschreibt einen Zusammenhang zwischen Berufsbestrebungen japanischer, höherer Mittelschulstudenten und ihrem Sozialklassenursprung. Ein Vergleich unserer Resultate mit einem kleinen Überblick in den Vereinigten Staaten wies einen Unterschied auf: japanische Studenten von Mittel- und niedrigerem Klassenursprung machten viel grössere Anforderungen als die entsprechenden amerikanischen Studenten. Weiters stellten sich die Aufzeichnungen über die Bestrebungen von japanischen Studenten aus niedrigerem Klassenursprung als einigermassen höher heraus als die der Studenten aus Mittelklassenursprung. Eine Testserie beweist, dass die flache oder sogar gewölbte Linie der Verteilung von Berufsbestrebungen von Studenten nicht Reaktionsvorurteilen zugeschrieben werden kann. Dieselbe Methode wurde in jeder einzelnen Art von Lehrplan in ländlichen oder städtischen Gebieten unter Ein- und Ausschluss von Bauernsöhnen und innerhalb der Klassenrangkategorie der Studenten wiederholt. Ausserdem enthielten die Teste Untersuchungen der charakteristischen Eigenschaften jener Studenten, die die Fragen über Berufsbestrebungen nicht beantwortet hatten. Sensitivitätsteste (hier nicht in Einzelheiten beschrieben) bewiesen auch, dass der Unterschied zwischen den japanischen und amerikanischen Befunden nicht irgendwelchen Unterschiedlichkeiten im Standkodex zugeschrieben werden konnten. Wir kamen zu der Schlussfolgerung, dass die Berufsbestrebungen der japanischen Studenten viel weniger von ihrem Sozialklassenursprung beeinflusst sind als man erwarten könnte.